

Product Range Overview 2010



Renewable Energies

Heat Pumps

Solar Thermal Systems

Domestic Heating Products

2010



Heatpumps



Solar Thermal Systems



Domestic Heating Systems

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Heating and domestic hot water preparation package

Max. flow temperature for heating 58 °C

Casing colour white aluminium

Heat pump and HWK 332 Econ hydro tower



HPL...TUW

The Hydro Tower with integrated WPM EconPlus regulation enables the fast and simple connection of an air-to-water heat pump installed outdoors to a heating system with an unmixed heating circuit. The following components are mounted and wired in a space-saving way inside a single casing.

- Switchable pipe heater (2/4/6 kW)
- Safety valve incl. connection for an expansion vessel
- Buffer tank (100 l) with installation option for an additional immersion heater (up to CTHK 634).
- Hot water cylinder (300 l) with installation option for an additional heating element (flange heater).
- Electronically regulated circulating pump (energy-efficiency class A) pre-wired with coupling relay for an unmixed heating circuit (consumer circuit).
- Unregulated circulating pump integrated for the generator circuit and hot water circulating pump.
- The hydraulic isolation of the generator circuit and the consumer circuit is done via two differential pressureless manifolds (bypass pipes), which are each fitted with a check valve.

The unregulated circulating pump in the generator circuit is only operated when the compressor is running in order to reduce the run-times. The uniform flow through the buffer tank connected in series extends the runtimes of the compressor and ensures the required heating water flow in all operating situations.

Electrical connection cable EVL . . . U between heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A Connection heating 1 1/4" Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output kW	Features	Weight kg	
HPL9TUW	362630	7.5kW	Package LA 9TU with HWK 332 Econ hydro tower	418	
HPL12TUW	362640	9.4kW	Package LA 12TU with HWK 332 Econ hydro tower	490	
HPL17TUW	362650	14.6kW	Package LA 17TU with HWK 332 Econ hydro tower	446	

Heat output according to EN 14511 at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C)

The technical data for the heat pump can be found on the following pages. The sales package consists of a high-efficiency heat pump without WPM EconPlus and the HWK 332 Econ hydro tower with integrated heat pump manager.

The HWK 332 hydro tower (without integrated HPM) can be ordered for use in combination with air-to-water heat pumps from the LA... AS/PS series. If the heating water connection lines are more than 10 m long, the free compression values stated in the device information must be observed (minimum pipe diameter for volume flows of more than 1.5 m³/h: DN 32)!

High-efficiency air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white aluminium



LA9TU



LA12TU

Heat pump for heating purposes for outdoor installation with wall-mounted WPM EconPlus heat pump manager. Sound-optimised through the use of slow-running „owl's wing“ fans with a low, natural-sounding noise, an encapsulated compressor housing with free-swinging compressor baseplate for solid-borne sound insulation. High COPs through high-performance evaporator and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Sensor monitoring of the refrigerating circuit for energy-efficient defrosting; integrated thermal energy metering (display of the thermal energy volume for heating and domestic hot water preparation on the WPM EconPlus heat pump manager). Access for servicing on the outlet side; observe the minimum clearances for installation close to walls. Universal design with the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Electrical connection cable EVL . . U between heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C Refrigerant R404A Connection heating 1 1/4" Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
LA9TU	358520	7.6/ 3.8 (3.7)	3/N/PE ~400 V, 50 Hz	910x 1460 x 750	208	
LA12TU	358530	9.5/ 3.8 (3.7)		1250x 1810 x 750	280	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C)
The air outlet must be positioned at a right angle to the main wind direction if unsheltered outdoor installation is carried out. If this is not possible, a weather protection hood must be installed!

High-efficiency air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white aluminium

with two performance levels



LA17TU



LA40TU

Heat pump for heating purposes for outdoor installation, with wall-mounted WPM EconPlus heat pump manager and two compressors for output reduction when operating at partial load. Sound-optimised through the use of slow-running „owl's wing“ fans with a low, natural-sounding noise, an encapsulated compressor housing with free-swinging compressor baseplate for solid-borne sound insulation. High COPs through high-performance evaporator and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Sensor monitoring of the refrigerating circuit for energy-efficient defrosting; integrated thermal energy metering (display of the thermal energy volume for heating and domestic hot water preparation on the WPM EconPlus heat pump manager). Access for servicing on the outlet side; observe the minimum clearances for installation close to walls. Universal design with two compressors for modulating operation, optional DHW preparation and the possibility of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Electrical connection cable EVL . . U between heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A Connection voltage 3/N/PE~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A2/W35	Width x Height x Depth mm	Weight kg	
LA17TU	358540	8.4/ 3.9 (3.8)	14.7/ 3.8 (3.7)	1600x 1940 x 955	436	
LA25TU	358550	11.4/ 3.9 (3.8)	19.7/ 3.8 (3.7)		510	
LA40TU	358560	17.1/ 4.0 (3.9)	30.4/ 3.9 (3.8)	1735x 2100 x 980	585	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C)
The air outlet must be positioned at a right angle to the main wind direction if unsheltered outdoor installation is carried out. If this is not possible, a weather protection hood must be installed!

High-efficiency air-to-water heat pump

Max. flow temperature for heating 60 °C

Casing colour white aluminium

with two performance levels



LA60TU

Heat pump for heating purposes for outdoor installation, with wall-mounted WPM EconPlus heat pump manager and two compressors for output reduction when operating at partial load. Sound-optimised through the use of two slow-running EC ventilators, an encapsulated compressor housing and a free-swinging compressor baseplate for solid-borne sound insulation. High COPs through high-performance evaporator, electronic expansion valve and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Sensor monitoring of the refrigerating circuit for energy-efficient defrosting; integrated thermal energy metering (display of the thermal energy volume for heating and domestic hot water preparation on the WPM EconPlus heat pump manager). Access for servicing on the outlet side; observe the minimum clearances for installation close to walls. Can be easily transported with a lift truck (accessible from underneath) or lifting lugs. Universal design with two compressors for modulating operation, optional DHW preparation and the possibility of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Electrical connection cable EVL . . UE between heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -20 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R417A Connection heating 2; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A2/W35	Width x Height x Depth mm	Weight kg	
LA60TU	362330	26.4/ 3.8 (3.7)	50.0/ 3.7 (3.6)	1900x 2300 x 1000	915	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C). From an external temperature of 0 °C, a maximum flow temperature of 65 °C is available, which can also be used for DHW preparation.

Note:

Dimplex heat pumps for heating purposes are designed for use in a domestic environment, and conform to the low voltage directive They are thus also intended for use by non-professionals for heating shops, offices, hotels and other similar working environments, in agricultural establishments and other residential buildings. The LA 60TU and SI 130TE heat pumps can be supplied, according to the machinery directive, with an external switch box upon request (order reference: LA 60TU-MD, SI 130TE-MD).

Electric connecting line heat pump – heat pump manager

Essential accessory for heat pumps with electronic expansion valves

Separate control lines (24V and 230V) between WPM EconPlus / EconR heat pump manager and the high-efficiency air-to-water heat pump with electronic expansion valve for outdoor installation. Wired ready for use with coded plug connections (non-confusable thanks to identical connections at both ends of the cable) for installation in a protective tube (minimum tube Ø 70 mm).

Order reference	Art.-Nr.	for device type	length m	Weight kg	
B/L 10UE	363520	LA60TU	10	5.5	
B/L 20UE	363530		20	10.0	
B/L 30UE	363540		30	15.5	
B/L 40UE	363550		40	21.0	

Essential accessory for high-efficiency air-to-water heat pumps. Should be installed separately from the mains cable.

Extension of the control line by the owner is not allowed!

Weather protection hood for high-efficiency air-to-water heat pumps



WSH40

Design weather protection cover for retrofitting to high-efficiency air-to-water heat pumps; covers the fan on the air outlet side; deflects the air outflow downwards and to the side; recommended for installation locations with high wind exposure, for example.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
WSH9	362110	LA9TU	856x 724 x 370	13	
WSH12	362120	LA12TU	1195x 1063 x 460	17	
WSH25	358970	LA17TU LA 25TU	1600x 1225 x 568	28	
WSH40	358240	LA40TU LA 35TUR+	1734x 1385 x 628	32	

Pipe assembly for high-efficiency air-to-water heat pumps for connection from the side



RBS..U

The pipe assembly, which can be screwed directly onto the heat pump, consists of two pipes which are specially curved and matched to the high-efficiency air-to-water heat pumps; these pipes have connecting flanges for the connection to the heating water system. When the heat pump is installed close to the outer wall, these pipes assemblies – which are fed out from the side of the heat pump (base frame on the air outlet side, on the right and below the fan) – can be used to create an above-ground infeed into the building (thermal insulation required for frost protection). In this case, the underground pipework routing for feeding the pipes into the cellar is not required.

Order reference	Art.-Nr.	for device type	Connection heating "	Weight kg	
RBS9U	358820	LA9TU	1¼	2.3	
RBS12U	358830	LA12TU		2.5	
RBS17U	358840	LA17TU			
RBS25U	358850	LA25TU	1½	2.7	
RBS40U	358860	LA40TU LA 35TUR+		3.0	
RBS40ZWT	358330	LA35TUR+ additional heat exchanger			
RBS60U	362470	LA60TU	2	5.2	

The height of the heat pump foundation required depends on the insulation thickness for the flow and return, the clearance to the wall, and the slope of the pipework.

Reversible high-efficiency air-to-water heat pump

Max. flow temperature for heating 56°C

flow temperature cooling min. 9°C

Casing colour white aluminium

Optimised for heating and cooling



LA35TUR+

Heat pump for heating and cooling purposes for outdoor installation with wall-mounted heat pump manager and two compressors for output reduction when operating at partial load. Sound-optimised by electronically-controlled fans and an encapsulated compressor housing with free-swinging compressor baseplate for solid-borne sound insulation; High COPs through high-performance evaporator and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Optimised heating and cooling operation via an external four-way reversing valve which is activated by the controller (special accessory). Sensor monitoring of the refrigerating circuit for energy-efficient defrosting; integrated thermal energy metering (display of the thermal energy volume for heating and domestic hot water preparation on the WPM EconR heat pump manager). Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Access for servicing on the outlet side; observe the minimum clearances for installation close to walls. Can be easily transported with a lift truck (accessible from underneath) or lifting lugs. Universal design with the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Electrical connection cable EVL . . U between heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 40 °C; lower operating limit heat source (cooling operation) 10°C; Upper operating limit heat source (cooling operation) 45°C; Refrigerant R417A; Connection heating 1½; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A2/W35	Cooling capacity 1 compressor / EER A27/W7	Cooling capacity with 2 compressors / EER A27/W18	Width x Height x Depth mm	Weight kg	
LA35TUR+	358570	14.0/ 4.3 (4)	24.2/ 4.0 (3.7)	15.0/ 4.2	32.0/ 3.9	1735x 2100 x 980	595	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2°C, W35 = heating water outlet temperature +35°C). Cooling capacity and coefficient of performance according to EN 14511.

From an external temperature of 0°C, a maximum flow temperature of 60°C is available, which can also be used for DHW preparation.

The performance values stated can only be achieved in combination with the external four-way valve available as an accessory!

Four-way reversing valve

Special hydraulic accessories for cooling

The four-way reversing valve (1¼" internal thread and/or 1½" internal thread) for integration into the heating flow allows optimised heating and cooling operation of the LA 35TUR+ reversible air-to-water heat pump. Switching takes place via an electromotive actuator (essential accessory) which is activated by the WPM EconR heat pump manager. The actuator is fitted to the reversing valve using a mounting set which is included in the scope of supply of the EMS VWU.



WVU ..



EMSVWU

Order reference	Art.-Nr.	for device type	Maximum volume flow m³/h	Features	Weight kg	
WVU 32	358600	LA35TUR+	3.5	Four-way reversing valve for switching from heating to cooling operation in flow and/or return flow. Essential accessories: EMS VWU	2.6	
WVU 40	358610		5.0		2.9	
EMSVWU	358580	WVU 32VWU 40		Actuator for 4-way reversing valves WVU, 3-point control signal, 1/N/PE ~230V, 50/60 Hz for short switching times (set time 30 s at 50 Hz), delivery includes mounting set.	1.5	

Electric connecting line heat pump – heat pump manager

Essential accessories

Separate control lines (24 V and 230 V) between WPM EconPlus / EconR heat pump manager and the high-efficiency air-to-water heat pump for outdoor installation. Wired ready for use with coded plug connections (non-confusable) at both cable ends for installation in a protective tube (tube Ø min. 70 mm).



B/L ..U

Order reference	Art.-Nr.	for device type	length m	Weight kg	
B/L 10U	355900	LA 9TU – LA 40TULA 35TUR+	10	5	
B/L 20U	355910		20	9	
B/L 30U	355920		30	14	
B/L 40U	355930		40	16	

Essential accessory for high-efficiency air-to-water heat pumps. Should be installed separately from the mains cable.
Extension of the control line by the owner is not allowed!

Heating package

Heat pump and HPK 200S hydraulic tower



HPL...

The hydraulic tower (W = 680 mm; H = 1660; D = 775) with integrated WPM 2006 plus controller enables the fast and simple connection of an air-to-water heat pump (installed outdoors) to a heating system with an unmixed heating circuit. The following components are mounted and wired in a space-saving way in a white sheet steel casing with red-brown design screen:

- Switchable pipe heater (2 / 4 / 6 kW)
- 200 l buffer tank with installation option for an additional immersion heater (up to CTHK 634)
- Electronically regulated circulating pump for unmixed heating circuits (consumer circuit)
- Expansion vessel (24 l) with safety module
- The hydraulic isolation of the generator circuit and the consumer circuit is done via two differential pressureless manifolds (bypass pipes), which are each fitted with a check valve.

The unregulated circulating pump in the generator circuit is only operated when the compressor is running in order to reduce the runtimes. The uniform flow through the buffer tank connected in series extends the runtimes of the compressor and ensures the required heating water flow in all operating situations. Integration option for hot water circulating pump (inside micrometer 180 mm, DN 32) and an additional mixed heating circuit (special accessories).

Electric cable EVL ... to connect the heat pump and the hydraulic tower must be ordered separately.

Order reference	Art.-Nr.	Features	Weight kg	
HPL11MS	356850	LA 11MS heating package and HPK 200S hydraulic tower	406	
HPL16MS	356860	LA 16MS heating package and HPK 200S hydraulic tower	451	
HPL8AS	356720	LA 8AS heating package and HPK 200S hydraulic tower	353	
HPL11TAS	362690	LA 11TAS heating package and HPK 200S hydraulic tower	380	
HPL16TAS	362700	LA 16TAS heating package and HPK 200S hydraulic tower	416	
HPL11AS	356730	LA 11AS heating package and HPK 200S hydraulic tower	406	
HPL11MAS	363970	LA 11MAS heating package and HPK 200S hydraulic tower	382	
HPL16AS	356740	LA 16AS heating package and HPK 200S hydraulic tower	451	
HPL16MAS	363980	LA 16MAS heating package and HPK 200S hydraulic tower	412	
HPL20AS	356750	LA 20AS heating package and HPK 200S hydraulic tower	471	
HPL24AS	356760	LA 24AS heating package and HPK 200S hydraulic tower	538	
HPL28AS	356770	LA 28AS heating package and HPK 200S hydraulic tower	542	
HPL9PS	356780	LA 9PS heating package and HPK 200S hydraulic tower	355	
HPL8PMS	363310	LA 8PMS heating package and HPK 200S hydraulic tower	419	
HPL11PS	356790	LA 11PS heating package and HPK 200S hydraulic tower	446	
HPL14PMS	363960	LA 14PMS heating package and HPK 200S hydraulic tower	456	
HPL17PS	356800	LA 17PS heating package and HPK 200S hydraulic tower	517	
HPL22PS	356810	LA 22PS heating package and HPK 200S hydraulic tower	547	
HPL26PS	356820	LA 26PS heating package and HPK 200S hydraulic tower	558	
HPL22HS	356830	LA 22HS heating package and HPK 200S hydraulic tower	598	
HPL26HS	356840	LA 26HS heating package and HPK 200S hydraulic tower	605	

The hydraulic tower cannot be ordered separately due to the integrated heat pump manager. For every combinable heat pump, there is a sales package consisting of the heat pump without controller and the hydraulic tower. The technical data for the heat pump can be found on the following pages.

If the heating water connection lines are more than 10 m long, the free compression values stated in the device information must be observed (minimum pipe diameter for volume flows of more than 1.5 m³/h: DN 32)!

Mixer module for HPK 200S hydraulic tower



MMHHPK

Extension module for integration of an additional mixed heating circuit into the HPK 200S hydraulic tower, consisting of ready-to-use pipe set with strap-on sensor, electronically controlled circulating pump (delivery height max. 6 m) and mixer module (3-way mixer with actuator, 140 s runtime, connection voltage 1/N/PE ~230 V, 50 Hz, degree of protection IP 40); useable for a hot water flow of up to 2 m³/h.

Order reference	Art.-Nr.	Short text	for device type	Weight kg	
MMHHPK	356930	mixer module for HPK 200S hydraulic tower	HPK200S	10.9	

Hydro tower with external heat pump manager

Compact installation for heating and domestic hot water preparation



HWK332

The hydro tower enables the fast and simple connection of a heat pump for heating purposes to a heating system with an unmixed heating circuit. The heat pump manager included in the scope of supply of the heat pump is used for the electronic control of the components (external wiring required). The following components are installed in a space-saving way and wired ready for use:

- Switchable pipe heater (2/4/6 kW)
- Buffer tank (100 l) with installation option for an additional immersion heater (up to CTHK 634).
- Hot water cylinder (300 l) with installation option for an additional heating element (flange heater).
- Electronically regulated circulating pump (energy-efficiency class A) pre-wired with coupling relay for an unmixed heating circuit (consumer circuit).
- Unregulated circulating pump integrated for the generator circuit and hot water circulating pump.
- The hydraulic isolation of the generator circuit and the consumer circuit is done via two differential pressureless manifolds (bypass pipes), which are each fitted with a check valve.

The unregulated circulating pump in the generator circuit is only operated when the compressor is running in order to reduce the runtimes. The uniform flow through the buffer tank connected in series extends the runtimes of the compressor and ensures the required heating water flow in all operating situations.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
HWK332	362360	LA 9 – 17TU, LA 11(T)AS, LA 20AS, LA 9 – 22PS LI 9 / 11 / 20TE SI(H) 5 – 11TE WI 9 / 14TE	710 x 1890 x 950	210	

If the heating water connection lines are more than 10 m long, the free compression values stated in the device information must be observed (minimum pipe diameter for volume flows of more than 1.5 m³/h: DN 32!)

Air-to-water heat pump for installation close to walls

low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C

Casing colour white aluminium

for installation close to walls



LA8AS

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. The diagonal air circuit allows installation close to walls. A minimum clearance of 30 cm must be allowed for on the air intake side. When mounting is done in an unprotected place, the air outlet must not be positioned against the main wind direction. Sound-optimised through the use of low-speed crescent wing axial-flow fans. Energy-efficient defrosting by reverse circulation und diagonally positioned evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A Connection heating 1; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
LA8AS	342230	6.6/ 3.1 (3.0)	3/N/PE~400 V, 50 Hz	750x 1280 x 650	166	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C)

low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C

Casing colour white aluminium

for installation close to walls



LA..TAS

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. Sound-optimised through the use of low-noise „owl's wings“ ventilator blades; Energy-efficient defrosting by reverse circulation. High coefficients of performance due to compliance with EN 14511 for larger volume flows on the heat consumption side. Observe the minimum clearances for installation close to walls. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A Control voltage 1 ~230V Connection heating 1

Order reference	Art.-Nr.	Heat output 1 compressor at A2/W35 / COP A2/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
LA11TAS	362570	8.6/ 3.4	3/N/PE ~400 V, 50 Hz	1050x 1340 x 852	193	
LA16TAS	362580	11.7/ 3.2	3/N/PE ~400 V, 50 Hz	1074x 1550 x 852	231	
LA11MAS	363760	7.9 / 3.4	1/N/PE ~230 V, 50 Hz	1050 x 1340 x 852	195	
LA16MAS	363770	11.9 / 3.1	1/N/PE ~230 V, 50 Hz	1074 x 1550 x 852	225	

Heat output and COP according to EN 14511 at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C)

The air outlet must be positioned at a right angle to the main wind direction if unsheltered outdoor installation is carried out.

Air-to-water heat pump for free-standing installation

Low-temperature air-to-water heat pump for free-standing installation

Max. flow temperature for heating 55 °C
Casing colour white aluminium



LA16AS

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation and inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits
- Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL . . . to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A; Connection heating 1

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
LA11MS	342420	9.1/ 3.4 (3.3)	1/N/PE ~230 V, 50 Hz	1360x 1360 x 850	219	
LA16MS	351270	12.7/ 3.2 (3.0)		1550x 1570 x 850	264	
LA11AS	339950	8.8/ 3.2 (3.1)	3/N/PE ~400 V, 50 Hz	1360x 1360 x 850	219	
LA16AS	339960	12.2/ 3.2 (3.1)		1550x 1570 x 850	264	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C) .

Reversible air-to-water heat pump Optimised for heating

Max. flow temperature for heating 55 °C
flow temperature cooling min. 7 °C
Casing colour white aluminium



LA11MSR

Air-to-water heat pump for outdoor installation with external temperature controlled heat pump manager WPM 2006 R and reversible refrigerating circuit for heating and cooling. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation and inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room.

Electric cable EVL . . . R to connect the heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C ;

Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C ;

Refrigerant R404A; Connection heating 1; Connection voltage 1/N/PE ~230 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Cooling capacity 1 compressor / EER A27/W7	Width x Height x Depth mm	Weight kg	
LA11MSR	342690	8.9/ 3.4 (3.3)	8.8/ 2.8	1360x 1360 x 850	224	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C).

Cooling capacity and coefficient of performance according to EN 14511.

Reversible air-to-water heat pump

Max. flow temperature for heating 58 °C
Flow temperature cooling min. 7 °C
Casing colour white aluminium

Optimised for heating operation with waste heat recovery



LA11ASR

Air-to-water heat pump for outdoor installation with external temperature controlled heat pump manager WPM 2006 R and reversible refrigerating circuit for heating and cooling. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation und inclined evaporator. Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Electric cable EVL ... R to connect the heat pump and heat pump manager must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C; lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C; Refrigerant R404A ; Connection heating 1; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Cooling capacity 1 compressor / EER A27/W7	Width x Height x Depth mm	Weight kg	
LA11ASR	342730	8.8/ 3.2 (3.1)	8.8/ 2.8	1360x 1360 x 850	241	
LA16ASR	340090	12.8/ 3.4 (3.2)	12.5/ 2.6	1550x 1570 x 850	289	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C).

Cooling capacity and coefficient of performance according to EN 14511.

phase out: LA 11ASR

The use of waste heat for DHW preparation produces high coefficients of performance in cooling operation!

Low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white aluminium

with two performance levels



LA20AS

Air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager and two compressors for output reduction when operating at partial load. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation und inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A Connection heating 1 1/2; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A2/W35	Width x Height x Depth mm	Weight kg	
LA20AS	339970	9.3/ 3.2 (3.1)	14.9/ 3.1 (3.0)	1550x 1570 x 850	284	
LA24AS	339980	10.9/ 3.0 (3.0)	19.2/ 3.2 (3.1)	1680x 1710 x 1000	351	
LA28AS	339990	12.8/ 3.1 (3.0)	22.3/ 3.2 (3.1)		355	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C) .

Air-to-water heat pump with higher flow temperatures

Medium-temperature air-to-water heat pump

Max. flow temperature for heating 65 °C
Casing colour white aluminium

for installation close to walls



LA9PS

Medium-temperature air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. Sound-optimised through the use of low-speed crescent wing axial-flow fans. When mounting is done in an unprotected place, the air outlet must not be positioned against the main wind direction. Energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL ... to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R290 Connection heating 1; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
LA9PS	340000	7.1/ 3.2 (3.1)	3/N/PE~400 V, 50 Hz	770x 1320 x 660	168	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C) .

The high flow temperatures are available for DHW preparation all year round!

Medium-temperature air-to-water heat pump

Max. flow temperature for heating 65 °C

Casing colour white aluminium

for free-standing installation



LA11PS

Medium-temperature air-to-water heat pumps for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager. Sound-optimised through the use of noise-reducing crescent wing axial-flow fans and air deflector hoods; energy-efficient hot gas defrosting. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
 - Distribution systems with unmixed and mixed heating circuits
- Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL . . . to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35°C;

Refrigerant R290 Refrigerant Connection heating 1 1/4

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
LA8PMS	362350	6.1/ 3.2 (3.1)	1/N/PE~230 V, 50 Hz	1362x 1361 x 852	232	
LA11PS	353320	9.2/ 3.1 (3.0)	3/N/PE~400 V, 50 Hz	1550x 1570 x 850	259	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2°C, W35 = heating water outlet temperature +35°C) .

The high flow temperatures are available for DHW preparation all year round!

Medium-temperature air-to-water heat pump

Max. flow temperature for heating 65 °C

Casing colour white aluminium

with two performance levels



LA26PS

Medium-temperature air-to-water heat pump for outdoor installation with external temperature controlled WPM 2006 plus heat pump manager and two compressors for flexible capacity. Sound-optimised through the use of noise-reducing crescent wing axial-flow fans and air deflector hoods; energy-efficient hot gas defrosting. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL . . . to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35°C;

Refrigerant R290 Connection heating 1 1/4 Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A2/W35	connection voltage	Width x Height x Depth mm	Weight kg	
LA14PMS	363820	5.8 / (2.9)	10.2 / (3.1)	1/N/PE ~230 V, 50 Hz	1550 x 1570 x 850	256	
LA17PS	353330	8.7/ 3.2 (3.0)	14.5/ 3.1 (3.0)	3/N/PE ~400 V, 50 Hz	1550x 1570 x 850	330	
LA22PS	348420	10.6/ 3.0 (3.0)	16.7/ 3.1 (3.0)		1680x 1710 x 1000	360	
LA26PS	351890	11.7/ 3.0 (3.0)	18.8/ 3.0 (3.0)			371	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2°C, W35 = heating water outlet temperature +35°C) .

The high flow temperatures are available for DHW preparation all year round!

Hgh-temperature air-to-water heat pump

Max. flow temperature for heating 75 °C

Casing colour white aluminium

with low- and high-temperature levels



LA22HS

High temperature air-to-water heat pump for outdoor installation with external temperature controlled heat pump manager. Sound-optimised through the use of low-noise crescent wing axial-flow fans and deflector hoods. Energy-efficient defrosting by reverse circulation and inclined evaporator. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

In the summer a maximum heating flow temperature of 58 °C is available for domestic hot water preparation. Integrated flow sensor and soft starter, return flow sensor and external temperature sensor included in the scope of supply.

Electric cable EVL . . . to connect the heat pump and heat pump manager, must be ordered separately.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35°C;

Refrigerant R404A Refrigerant R134a Connection heating 1 1/4 Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output 2 compressor / COP A-7/W45	Width x Height x Depth mm	Weight kg	
LA22HS	340120	13.6/ 3.1 (3.0)	13.5 / 2.1	1680x 1710 x 1000	411	
LA26HS	340130	15.9/ 3.2 (3.0)	15.2 / 2.2		418	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2°C, W35 = heating water outlet temperature +35°C).

Heat output with 2 compressors and COP acc. to EN 14511 at A-7/W45 (A-7 = air intake temp. -7 °C, W45 = heating water outlet temp. +45 °C)

The maximum flow temperature of 75 °C is reached at an air intake temperature from -25° C to +10° C (high-temperature level).

At outdoor temperatures above 10 °C, the maximum flow temperature is +58 °C (low-temperature level).

Electric connecting line heat pump – heat pump manager



B/L ...

Control line between the heat pump manager and the air-to-water heat pump for outdoor installation. Wired ready for use and with coded plug connections at both ends for installation in a protective tube (min. diameter 70 mm, non-confusable: Round plug for connection to the heat pump).

Order reference	Art.-Nr.	for device type	length m	Weight kg	
B/L 996-1	321990	LA..AS LA ..PS LA ..MS	10	2.9	
B/L 997-1	322000		20	4.6	
B/L 998-1	322010		30	8.7	
B/L 999-1	359120		40	12.8	

Should be installed separately from the mains cable.

Extension of the control line by the owner is not allowed!

Electric connecting line heat pump – heat pump manager



B/L 10...30R

Control line between the heat pump manager WPM 2006 R and a reversible air-to-water heat pump for outdoor installation. Wired ready for use and with coded plug connections on both ends (non-confusable) for installation in a protection tube (diameter min. 70 mm).

Order reference	Art.-Nr.	for device type	length m	Weight kg	
B/L 10R	342510	LA...R	10	5	
B/L 20R	342520		20	9	
B/L 30R	342530		30	14	
B/L 40R	363720		40	18	

Should be installed separately from the mains cable.

Extension of the control line by the owner is not allowed!

Heating water connection line, heat pump – heating system

Optimised for connection to a heat pump



HVL..

Isolated 2-pipe system (suitable for ground-laying) with ready-to-use 90° bend for connection to a heat pump installed outdoors. Suitable for heat pumps for heating and cooling; max. operating temperature 95 °C; max. operating pressure 6 bar (at 65 °C – 9 bar); loading capacity SWL 60 (33 kN/m²). Consisting of PE-Xa medium pipes with EVOH barrier layer to prevent oxygen diffusion, closed-cell crosslinked PE foam and a highly-flexible corrugated PE-HD cover pipe; includes a ready-to-use 90° connection pipe (length 1.2 m) for quick and easy connection to the heat pump, including two PE end caps, hazard-warning tape „Caution district heating“ and four screw fittings (2 x 1 ¼" internal thread, 2 x 1 ¼" external thread).

Order reference	Art.-Nr.	Connection heating "	Features	Weight kg	
HVL25-50	358650	1 ¼	Length 5 m + 1.2 m connection pipe, 2 x 32/2.9 Ø cover pipe, 145 mm	29	
HVL25-75	358660		Length 7.5 m + 1.2 m connection pipe, 2 x 32/2.9 Ø cover pipe, 145 mm	33	
HVL25-100	358670		Length 10 m + 1.2 m connection pipe, 2 x 32/2.9 Ø cover pipe, 145 mm	38	
HVL25-150	358880		Length 15 m + 1.2 m connection pipe, 2 x 32/2.9 Ø cover pipe, 145 mm	42	
HVL32-150	358680		Length 15 m + 1.2 m connection pipe, 2 x 40/3.7 Ø cover pipe, 175 mm	61	
HVL32-200	358690		Length 20 m + 1.2 m connection pipe, 2 x 40/3.7 Ø cover pipe, 175 mm	74	
HVL32-250	358700		Length 25 m + 1.2 m connection pipe, 2 x 40/3.7 Ø cover pipe, 175 mm	88	

Additional, transitional screw connections (1 ½" thread-sealing to 1 ½" flat-sealing) are required for high-efficiency heat pumps.

The pressure drops required for pump dimensioning can be found in the installation instructions.

Connection heat pump – heating water connection line

Optimised for connection to a heat pump



Flexible hose connection set, length 250 mm, for fast and simple connection of an air-to-water heat pump (installed outdoors) to a heating water connection line laid under the ground. Consists of two insulated stainless steel Wellflex pipes with cap nuts and screw connections.

Order reference	Art.-Nr.	for device type	Connection heating "	Features	Weight kg	
VSF25	361790	LA 9 – 17TU LA 9 – 16AS LA 9 – 11PS	1 1/4	Stainlesssteel Wellflex DN 25	1.4	
VSF32	361800	LA25TU LA 20 – 28AS LA 17 – 26PS LA 22 – 26HS		Stainlesssteel Wellflex DN 32	1.4	

House infeeds for heating water connection lines

For pressuring and non-pressuring water



House infeeds as an accessory for HVL 25 and HVL 32 heating water connection lines. The MDM sealing collars, consisting of a protection tube with shrink hose, are suitable for non-pressuring water (rain water, surface water and leakage water). The MDF sealing flange (stainless steel V2A) is suitable for pressuring water (slope water, ground water, plain tracts and water veins).

Order reference	Art.-Nr.	Short text	Features	Weight kg	
MDM145	358890	aW-sealing collar (protection tube with shrink hose)	Sealing collar for HVL 25 (cover Ø 145 mm) as a house infeed (recommended drilling Ø 220 mm) through brickwork	1.3	
MDM175	358900		Sealing collar for HVL 32 (cover Ø 175 mm) as a house infeed (recommended drilling Ø 260 mm) through brickwork	1.5	
MDF145	358910	aW-sealing flange (stainless steel V2A)	Wall-sealing flange for HVL 25 (cover Ø 145 mm), sealing width 80 mm, recommended drilling Ø 200 mm	2.3	
MDF175	358920		Wall-sealing flange for HVL 32 (cover Ø 175 mm), sealing width 80 mm, recommended drilling Ø 250 mm	2.6	

For brickwork walls:

So that water cannot penetrate the house infeeds, these must be painted with a bitumen-based protective coating. The house feed-through (MDF) must additionally be stabilised with a casing tube to seal it against pressuring water.

General installation material

for connecting the heat pump to the heating system

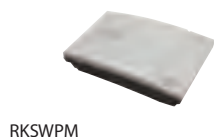


Order reference	Art.-Nr.	Short text	Connection heating "	Features	Weight kg	
SMF25	362130	D25 dirt trap	1	Mesh size 0.6 mm for LA 8 – LA 16AS(R)/PS	1.0	
SMF32	362140	D32 dirt trap	1¼	Mesh size 0.6 mm for LA 17 – 28PS/AS/HS	1.2	
AS976	322180	1" connecting hose	1	Flexible, compression-proof hose for connecting the heat pump to the heating system, length 10 m, can be cut to length, without insulation.	7.0	
AS976-1	330530	1¼" connecting hose	1¼		8.5	
SCHT975-1	322250	1" external thread hose nozzle for 1" connecting hose	1	Hose nozzle with external thread and hose clip for connecting hose, (for connection to the heating system e.g. compact manifold).	0.2	
SCHT975-3	322260	1¼" external thread hose nozzle for 1" connecting hose	1¼		0.3	
SCHT975-4	330540	1¼" external thread hose nozzle for 1¼" connecting hose			0.3	
TUE430	337430	1" nozzle for 1" connecting hose	1	Nozzle with cap nut (internal thread) for connecting hose (for connection to heat pump).	0.2	
TUE440	337440	1¼" nozzle for 1¼" connecting hose	1¼		0.3	

Their allocation to heat pumps and further information concerning the recommended use of the expansion joints can be found in the product section on heat pump distribution systems.

Room climate control station for temperature and humidity measurement

This accessory is essential for silent cooling using panel heating/cooling systems. Connection to a cooling controller to control the flow temperature based on the measured room temperature and humidity via a reference room.



RKSWPM

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
RKSWPM	342220	WPM	127x 80 x 30	0.2	

Dew point monitor and dew point sensors

Dew point monitor

Switching relay for electronic evaluation of up to 5 connectable dew point sensors to interrupt cooling operation of the complete system in case of condensation at vulnerable points in the cooling distribution system; TPF 341 dew point sensors must be ordered separately; connection to the cooling controller; operating voltage 24 V~ / 50 Hz.

Dew point sensor

Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).



TPWWPM

Order reference	Art.-Nr.	Short text	for device type	Width x Height x Depth mm	
TPWWPM	350970	Dewpoint monitor	WPM	35x 86 x 60	
TPF341	350980	Dewpoint sensor	RTK 601U	38x 40	

When the dew point sensor comes into contact with condensation, the cooling of the system is interrupted!



TPF341

Heating/cooling ON/OFF room temperature controller

Room temperature controller

Electronic room temperature controller heating/cooling; switchable between "Heating" and "Cooling" operating modes using an external change-over contact of the heat pump manager; flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switch ON / antifreeze; controlling range 5 to 30 °C; thermostat dial; temperature range limitation in the casing cover; operating voltage 24 V ~/50 Hz; switching capacity 24 V AC ~/1 A, can control up to 5 valve actuators (24 V~ closed when de-energised), IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dew point sensor TPF 341, for interrupting cooling operation when there is risk of condensate, optional connection (dew point sensors are not included in the scope of supply).

Dew point sensor

Flexible OCB, which sends a signal to the room temperature controller (RTK 601U) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).



RTK 601U

Order reference	Art.-Nr.	Short text	Width x Height x Depth mm	Weight kg	
RTK 601U	355610	Roomtemperature controller heating/cooling	82x 86 x 45	0.2	
TPF341	350980	Dewpoint sensor	38x 40	0.1	

When the dew point sensor comes into contact with condensation, the cooling of a room is interrupted by the motors attached to the room temperature controller.

Further room temperature controllers are listed in the chapter on control and regulation devices!

Air-to-water heat pump with simplified controller

Max. flow temperature for heating 58 °C
Casing colour white aluminium

Compact design



LAK10M

Air-to-water heat pumps for close-to-wall outside installation and integrated heat pump control. The remote control included in the scope of supply enables the manual setting of the desired return temperature or the external switching via a higher-level regulation system. Energy-efficient defrosting by reverse circulation. Essential components of the heating circuit are already integrated into the device:

- Built-in pipe heater (2 / 4 / 6 kW),
- Expansion vessel (8 l)
- Safety module
- Return flow and external temperature sensors

Lower operating limit heat source (heating operation) -20 °C; Upper operating limit heat source (heating operation) 35 °C;
Refrigerant R404A; Connection heating 1"; Connection voltage 1/N/PE ~230 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
LAK10M	354540	8.1/ 3.4 (3.2)	1/N/PE~230 V, 50 Hz	1285x 880 x 695	185	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C)

Reversible air-to-water heat pump with simplified controller

Reversible air-to-water heat pump

Max. flow temperature for heating 58 °C
flow temperature cooling min. 7 °C
Casing colour white aluminium

Compact design optimised for heating



LAK10MR

Air-to-water heat pump for outdoor installation with reversible refrigerating circuit for heating and cooling and simplified regulation. The remote control included in the scope of supply enables the manual setting of the desired room temperature or the external switching via a higher-level regulation system. Essential components of the heating circuit are already integrated into the device:

- Built-in pipe heater (2 / 4 / 6 kW),
- Heat circulating pump (note the free compression)
- Expansion vessel (8 l)
- Safety module
- Return flow and external temperature sensors

Lower operating limit heat source (heating operation) -20 °C; Upper operating limit heat source (heating operation) 35 °C ;
Lower operating limit heat source (cooling operation) 17 °C; Upper operating limit heat source (cooling operation) 40 °C ;
Refrigerant R407C; Connection heating 1"; Connection voltage 1/N/PE ~230 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A7/W35	Cooling capacity 1 compressor / EER A35/W7	Connection voltage	Width x Height x Depth mm	Weight kg	
LAK10MR	354510	9.3/ 3.8	7.8/ 2.2	1/N/PE~230 V, 50 Hz	1270x 860 x 670	170	

Heat output and COP according to EN 14511 at A7/W35 (A7 = air intake temperature +7 °C, W35 = heating water outlet temperature +35 °C).
Cooling capacity and COP at A35/W7 (A35 = air intake temperature +35 °C, W7 = cooling water outlet temperature +7 °C)

Reversible air-to-water heat pump

Max. flow temperature for heating 60 °C
flow temperature cooling min. 7 °C
Casing colour white aluminium

Optimised for cooling at higher outside temp.



LAC 16TR

Air-to-water heat pump for outdoor installation with reversible refrigerating circuit for heating and cooling and simplified regulation. The remote control included in the scope of supply enables the manual setting of the desired return temperature or the external switching via a higher-level regulation system. Energy-efficient defrosting by reverse circulation. Essential components of the heating circuit are already integrated into the device:

- Built-in pipe heater (2 / 4 / 6 kW),
- Heat circulating pump (note the free compression)
- Expansion vessel (8 l)
- Safety module
- Return flow and external temperature sensors

Lower operating limit heat source (heating operation) -20 °C; Upper operating limit heat source (heating operation) 35 °C ;
Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 45 °C ;
Refrigerant R417A; Connection heating 1"; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A7/W35	Cooling capacity 1 compressor / EER A35/W7	Connection voltage	Width x Height x Depth mm	Weight kg	
LAC 16TR	355240	13.3/ 3.7	14.0/ 2.8	3/N/PE~400 V, 50 Hz	1270x 860 x 670	196	

Heat output and COP according to EN 14511 at A7/W35 (A7 = air intake temperature +7 °C, W35 = heating water outlet temperature +35 °C).
Cooling capacity and COP at A35/W7 (A35 = air intake temperature +35 °C, W7 = cooling water outlet temperature +7 °C)

Air-to-water swimming pool heat pump with titanium heat exchanger

Casing colour white aluminium



LAS10-22M(T)T

Air-to-water heat pump for outdoor installation for heating swimming pool water. Titanium heat exchanger for safe operation, also suitable for salt water and any type of water preparation; efficient use of environmental energy thanks to SCROLL compressor; year-round operation thanks to integrated automatic defrosting as standard; soft starter as standard; control via wired remote control included in the scope of supply; stainless steel upright support; powder-coated sheet steel casing.

Lower operating limit heat source (heating operation) -10 °C Upper operating limit heat source (heating operation) 35 °C Refrigerant

R407C Connection heating 1

Order reference	Art.-Nr.	Heat output A10/W24	Connection voltage	Width x Height x Depth mm	Weight kg	
LAS10MT	352060	10.1	1/N/PE ~230 V, 50 Hz	1270x 860 x 670	147	
LAS15MT	352070	13.5			155	
LAS22TT	352080	18.1	3/N/PE~400 V, 50 Hz		162	

Heat output and COP at A10/W24 (A10 = air intake temperature +10 °C, W24 = heating water outlet temperature +24 °C)

Low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Compact design



LIK8TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Expansion vessel (24 l)
- Heat circulating pump (free compression 45,000 Pa)
- Overflow valve and safety module
- Buffer tank (50 l) with integrated 2 kW heating element

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) and 3 flexible connecting hoses (1", 500mm) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C;
Refrigerant R404A; Connection heating 1"

Order reference	At.-Nr.	Heatoutput with 1 compressor / COP A2/W35	Connection voltage	Airoutlet	Width x Height x Depth mm	Weight kg	
LIK8ME	352750	7.5/ 3.3 (3.2)	1/N/PE ~230 V, 50 Hz	right	750x 1900 x 680	245	
LIK8TE	352590		3/PE ~400 V, 50 Hz				
LIK8TEL	352600			left	750x 1900 x 650	264	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C).
Delivery times for heat pumps with air output on the left on request!

Reversible air-to-water heat pump

Max. flow temperature for heating 58 °C
flow temperature cooling min. 7 °C
Casing colour white

Compact design optimised for heating



LIK8MER

Heat pump for heating and cooling for indoor installation with integrated WPM 2007 R controller. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Must not be used for bivalent systems. Compact design with optional DHW preparation and integrated components for direct connection with fan convectors:

- Expansion vessel (24 l)
 - Heat circulating pump (free compression 45,000 Pa)
 - Overflow valve and safety module
 - Buffer tank (50 l) with integrated 2 kW heating element
- Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) and 3 flexible connecting hoses (1", 500mm) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C ;
Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C ;
Refrigerant R404A; Connection heating 1"; Connection voltage 1/N/PE ~230 V, 50 Hz

Order reference	Att.-Nr.	Heat output with 1 compressor / COP A2/W35	Cooling capacity 1 compressor / EER A27/W7	Connection heating "	Width x Height x Depth mm	Weight kg	
LIK8MER	352790	7.5/ 3.3 (3.2)	7.9/ 2.6	1	750x 1900 x 680	250	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C).
Cooling capacity and coefficient of performance according to EN 14511.

Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

Low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Universal design



LI9TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits
- Built-in pipe heater (2 / 4 / 6 kW),

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.
Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;
Refrigerant R404A Connection heating T°; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Airoutlet	Width x Height x Depth mm	Weight kg	
LI9TE	352610	7.5/ 3.3 (3.2)	right	750x 1250 x 680	177	
LI9TEL	352620		left			

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C) .
Delivery times for heat pumps with air output on the left on request!

Medium-temperature air-to-water heat pump

Max. flow temperature for heating 65 °C
Casing colour white

Compact design



LIKI 14TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow with 90° air deflection enables direct corner installation without air ducts or wall installation with air ducts on the air outlet side. High coefficients of performance thanks to compliance with EN 14511 for larger volume flows on the heat consumption side, optimised high-performance evaporator for heating operation and dual differential pressureless manifold for reducing pump operating times. Sound-optimised through low-noise ventilator and insulated metal casing; integrated solid-borne sound insulation for direct connection to the heating system with free-swinging compressor base plate.

Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Heat circulating pump (note the free compression)
- Expansion vessel (24 l)

120 l buffer tank (can be dismantled) with integrated switchable supplementary heating 3/6 kW, safety module. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply. A heat circulating pump not included in the scope of supply is required for the distribution system.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;
Refrigerant R417A Connection heating T°; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Airoutlet	Width x Height x Depth mm	Weight kg	
LIKI14TE	356010	10.1/ 3.6 (3.4)	right	960x 2100 x 780	365	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C) .
For the air circuit, varying duct dimensions are to be used (air intake side 800, air outlet side 600)! Transport heights when disassembled:
Heat pump with hydraulics approx. 1.65 m, buffer tank approx. 55 cm.

Air connection plate for air outlet side LIKI 14TE

for modification of the air circuit



ABL14

Air connection plate for mounting on the LIKI 14TE air-to-water heat pump. By mounting the side covering panel onto the left side of the heat pump, the air outlet side can be moved from the standard right-side air circuit to the opposing left side; side wall painted (white, similar to RAL 9003) assembly material included.

Order reference	Art.-Nr.	for device type	Weight kg	
ABL14	358210	LIKI14	3.5	

Low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Universal design



LI11/16TE(L)

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits
- Built-in pipe heater (2 / 4 / 6 kW) (not LI 11ME),

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A Connection heating 1 1/4"

Order reference	Art.-Nr.	Heatoutput with 1 compressor / COP A2/W35	Connection voltage	Airoutlet	Width x Height x Depth mm	Weight kg	
LI11ME	352760	9.1/ 3.4 (3.3)	1/N/PE~230 V, 50 Hz	right	750x 1360 x 880	200	
LI11TE	352630	8.8/ 3.2 (3.1)	3/N/PE ~400 V, 50 Hz	left		210	
LI11TEL	352640			right	235		
LI16TE	352650	12.2/ 3.2 (3.1)		left	245		
LI16TEL	352660						

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C) .

Delivery times for heat pumps with air output on the left on request!

Reversible air-to-water heat pump

Max. flow temperature for heating 58 °C
flow temperature cooling min. 7 °C
Casing colour white

Optimised for heating



LI11MER

Heat pump for heating and cooling for indoor installation with integrated WPM 2007 R controller. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with optional DHW preparation and the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C; Upper operating limit heat source (heating operation) 35 °C ;

Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C ;

Refrigerant R404A Connection heating 1 1/4"; Connection voltage 1/N/PE ~230 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Cooling capacity 1 compressor / EER A27/W7	Connection heating "	Width x Height x Depth mm	Weight kg	
LI11MER	352800	8.9/ 3.4 (3.3)	8.8/ 2.8	1 1/4"	750x 1360 x 880	205	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C). Cooling capacity and coefficient of performance according to EN 14511.

Reversible air-to-water heat pump

Max. flow temperature for heating 58 °C
flow temperature cooling min. 7 °C
Casing colour white

Optimised for heating operation with waste heat recovery



LI11/16TER+

Heat pump for heating and cooling for indoor installation with integrated WPM 2007 R controller. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C ;

Lower operating limit heat source (cooling operation) 15 °C; Upper operating limit heat source (cooling operation) 40 °C ;

Refrigerant R404A Connection heating 1 1/4; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Cooling capacity 1 compressor / EER A27/W7	Connection heating "	Width x Height x Depth mm	Weight kg	
LI11TER+	352770	8.8/ 3.2 (3.1)	8.8/ 2.8	1 1/4	750x 1360 x 880	232	
LI16TER+	352780	12.8/ 3.4 (3.2)	12.5/ 2.6		750x 1570 x 880	270	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C). Cooling capacity and coefficient of performance according to EN 14511.

Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

The use of waste heat for DHW preparation produces high coefficients of performance in cooling operation!

Built-under buffer tank



PSP140E

Nominal content 140 l; in air-to-water heat pump design to enable space-saving installation on top of the built-under buffer; polyurethane insulation with minimal downtime losses (can be used for heating and cooling), incl. 2 1 1/2" bushes for immersion heaters (up to CTHK 636); 1" heating water connections; colour: white; brown red design screen.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
PSP140E	353970	LI1 – LI 20 ..(R)	750x 600 x 880	72	

Low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Universal design with two performance levels



LI20-28TE(L)

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with two compressors for output reduction when operating at partial load, optional DHW preparation and the possibility of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35 °C;

Refrigerant R404A Connection heating 1 1/4; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A2/W35	Airoutlet	Width x Height x Depth mm	Weight kg	
LI20TE	352670	9.3/ 3.2 (3.1)	14.9/ 3.1 (3.0)	right	750x 1570 x 880	255	
LI20TEL	352680			left			
LI24TE	352690	10.9/ 3.0 (3.0)	19.2/ 3.2 (3.1)	right	750x 1710 x 1030	310	
LI24TEL	352700			left			
LI28TE	352710	12.8/ 3.1 (3.0)	22.3/ 3.2 (3.1)	right		314	
LI28TEL	352720			left			

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2 °C, W35 = heating water outlet temperature +35 °C) .

Delivery times for heat pumps with air output on the left on request!

High-temperature air-to-water heat pump

Max. flow temperature for heating 75 °C
Casing colour white

Universal design with low- and high-temperature levels



LIH22/26TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). The integrated air flow enables corner or wall installation with air ducts at the air intake and the air outlet side. Sound-optimised through low-noise axial-flow fan and vibration-isolated compressor. High coefficients of performance using an evaporator optimised for heating operation and energy-efficient defrosting by reverse circulation. Universal design with low-temperature and high-temperature levels, optional DHW preparation and the possibility of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

In the summer a maximum heating flow temperature of 58 °C is available for domestic hot water preparation. Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35°C;
Refrigerant R404A Refrigerant R134a Connection heating 1 1/2; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A-7/W45	Width x Height x Depth mm	Weight kg	
LIH22TE	352730	13.6/ 3.1 (3.0)	13.5/ 2.1	750x 1710 x 1030	370	
LIH26TE	352740	15.9/ 3.2 (3.0)	15.2/ 2.2		377	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2°C, W35 = heating water outlet temperature +35°C). Heat output with 2 compressors and COP acc. to EN 14511 at A-7/W45 (A-7 = air intake temp. -7°C, W45 = heating water outlet temp. +45°C)

The maximum flow temperature of 75 °C is reached at an air intake temperature from -25° C to +10° C (high-temperature level).

At outdoor temperatures above 10°C, the maximum flow temperature is +58°C (low-temperature level).

Low-temperature air-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

for wall installation with two performance levels



LI40AS

Heat pump for heating purposes for indoor installation with wall-mounted WPM 2006 plus heat pump manager and two compressors for output reduction when operating at partial load. The air is drawn in via the heat pump installed directly in front of the wall. The air circuit on the air outlet side is established via air ducts. Sound-optimised through low-noise, low-speed axial-flow fan and encapsulated compressor housing; energy-efficient defrosting by reverse circulation. High COPs through high-performance evaporator and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with two compressors for modulating operation, optional DHW preparation and the possibility of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter and flow sensors; return flow and external sensors (standard NTC-2) included in the scope of supply.

Electrical connection line EVL 996-1 (10m) between heat pump and heat pump manager included in the scope of supply.

Lower operating limit heat source (heating operation) -25 °C Upper operating limit heat source (heating operation) 35°C;
Refrigerant R404A Connection heating 1 1/2; Connection voltage 3/N/PE ~400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP A2/W35	Heat output with 2 compressors / COP A2/W35	Air outlet	Width x Height x Depth mm	Weight kg	
LI40AS	358300	17.1/ 4.0 (3.9)	30.4/ 3.9 (3.8)	fanside	1735x 2100 x 890	590	

Heat output and COP according to EN 255 (EN 14511) at A2/W35 (A2 = air intake temperature +2°C, W35 = heating water outlet temperature +35°C) .

Airducts

Optimally suited for air-to-water heat pump air circuits; GFRG exterior; thermally insulated and sound-insulated on the inside to prevent the formation of condensate and considerably reduce sound transmission. The ducts must be protected against driving rain and can, if necessary, be cut to length and/or painted with waterproof emulsion paint on site. Minor damage to the outer surface has no effect on the efficiency and can be repaired with standard plaster.



LKK...



LKB...



LKL...

Order reference	Art.-Nr.	Short text	for device type	length mm	Width x Height mm	Weight kg	
LKK500	339720	Shoair duct	LI 8 LI 9	625	500x 500	12	
LKL500	339710	obg air duct		1250		23	
LKB500	339730	90° air duct bend		800		17	
LKK600	339750	Shoair duct	LI 1... (R) LIKI 14 – air outlet	625	600x 600	14	
LKL600	339740	obg air duct		1250		28	
LKB600	339760	90° air duct bend		1100		25	
LKK700	339780	Shoair duct	LI 16... (R) LI 20	625	694x 694	16	
LKL700	339770	obg air duct		1250		32	
LKB700	339790	90° air duct bend		1244			
LKK800	339810	Shoair duct	LI (H) 22 – 28 LIKI 14 – air intake	625	769x 769	17	
LKL800	339800	obg air duct		1250		34	
LKB800	339820	90° air duct bend		1319		36	
LKK900	358250	Shoair duct	LI 40	625	950x 950	19	
LKL900	358260	obg air duct		1250		37	
LKB900	358270	90° air duct bend		1100		40	

For solid-borne sound insulation, the air ducts are not screwed directly onto the heat pump. They must be mounted (i. e. suspended) on site. The dimension drawings of the air ducts are available at www.dimplex.de/luftkanale for downloading!

Installation hardware

Installation hardware for sealing the cut edges, where ducts need to be cut to length. Consisting of channel-section frame (U profile) and fitting compound.



VSK...

Order reference	Art.-Nr.	for device type	Weight kg	
VSK500	341200	air ducts 500	2.0	
VSK600	341210	air ducts 600	3.0	
VSK700	341220	air ducts 700	3.5	
VSK800	341230	air ducts 800	4.0	
VSK900	358310	air ducts 900	4.5	

Sealing collars for air intake and air outlet

Circumferential rubber gasket for vibration-free connection of the air duct to the air intake and air outlet side of the heat pump. The component is attached via screwed fastening frames.



DMK...

Order reference	Art.-Nr.	packaging unit	for device type	Weight kg	
DMK500-1	340260	1	air ducts 500	4.0	
DMK600-1	356120	1	air ducts 600	4.5	
DMK600	340270	2		9.0	
DMK700-1	356130	1	air ducts 700	5.0	
DMK700	340280	2		10.0	
DMK800-1	356140	1	air ducts 800	6.0	
DMK800	340290	2		12.0	
DMK900-1	358280	1	air ducts 900	14.0	

One sealing ring each (packaging unit 1 item) must be ordered for the air intake and air outlet of air-to-water heat pumps with differing duct dimensions (e. g. LIKI 14TE).

Air duct hose set



IJS ...

Air circuit for internally installed air-to-water heat pumps for use in rooms with low temperatures and low humidity. The set contains a 5m length of thermally-insulated and sound-insulated air hose which can be used for both the air intake and the air outlet side. The air intake and air outlet can be established via a light well or wall opening which must be constructed and insulated on site. Mounting plates for the heat pump and the wall opening for intake and outlet as well as all the required installation materials are included in the scope of supply.

Order reference	Art.-Nr.	for device type	Diameter mm	length m	Weight kg	
IJS 11	337390	LI11	500	5	50	
IJS 16	337400	LI16	630			

Cannot be used for reversible heat pumps and in rooms with high humidity!

Heat pump rain guard



RSG500

Specially developed rain guard for protection from driving rain, for air-to-water heat pumps with low pressure loss of approx. 5 Pa ; the permissible overall pressure loss is not exceeded when standardly integrated with the air hose set and/or air ducts; aluminium frame (width 25 mm) for wall mounting; painted grey-white (RAL 9002).

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
RSG500	340220	airducts 500	650x 650 x 50	3.0	
RSG600	340230	airducts 600	750x 750 x 50	4.5	
RSG700	340240	airducts 700	840x 840 x 50	6.0	
RSG800	340250	airducts 800	920x 920 x 70	7.0	
RSG900	358290	airducts 900	1128x 1128 x 70	9.0	
RSG1500	358350	L40AS air intake	1726x 1440 x 70	14.0	

Deflection hood for air-to-water heat pumps installed indoors



IJH ..

Deflector hood for reducing the air outlet noise of air-to-water heat pumps installed indoors; fastening frame (included in the scope of supply) mounted for fitting the deflector hood to the external building wall (rain guard not required), casing colour: white aluminium structured (similar RAL 9006), can be painted.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
IJH 600	358620	LI1...(R) LIK 8 LI 9 LIK1 14TE	879x 758 x 343	16	
IJH 700	358630	LI6...(R) LI 20	879x 968 x 441	19	
IJH 800	358640	LI24 LI 28	1029x 1108 x 503	25	

Elasticated sound insulation strip



SYL 250

For solid-borne sound insulation of heat pumps for indoor installation and compensation of floor unevenness; strip-shaped support for the base frame; 12 mm thick (deformation approx. 1 mm); max. load 140 kg/RM; 2.5 m long (can be cut to appropriate length), colour green.

Order reference	Art.-Nr.	length mm	Width x Height mm	Weight kg	
SYL 250	352260	2500	30x 12	0.3	

Heating water hose connection set



SAS...

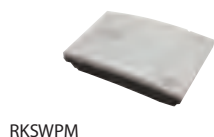
Hydraulic connection set to facilitate installation of air-to-water heat pumps. Consisting of:

- Two metal braided hoses (500 mm)
- two double nipples
- two 90° brackets
- two flat gaskets

Order reference	Art.-Nr.	for device type	Connection heating "	Weight kg	
SAS100	340320	L9TE(L)	1	2.2	
SAS110	340330	LI(H)1 – 28	1¼	3.5	

Room climate control station for temperature and humidity measurement

This accessory is essential for silent cooling using panel heating/cooling systems. Connection to a cooling controller to control the flow temperature based on the measured room temperature and humidity via a reference room.



RKSWPM

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
RKSWPM	342220	WPM	127x 80 x 30	0.2	

Dew point monitor and dew point sensors

Dew point monitor

Switching relay for electronic evaluation of up to 5 connectable dew point sensors to interrupt cooling operation of the complete system in case of condensation at vulnerable points in the cooling distribution system; TPF 341 dew point sensors must be ordered separately; connection to the cooling controller; operating voltage 24 V~ / 50 Hz.

Dew point sensor

Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).



TPWWPM

Order reference	Art.-Nr.	Short text	for device type	Width x Height x Depth mm	
TPWWPM	350970	Dewpoint monitor	WPM	35x 86 x 60	
TPF341	350980	Dewpoint sensor	RTK 601U	38x 40	

When the dew point sensor comes into contact with condensation, the cooling of the system is interrupted!



TPF341

Heating/cooling ON/OFF room temperature controller

Room temperature controller

Electronic room temperature controller heating/cooling; switchable between "Heating" and "Cooling" operating modes using an external change-over contact of the heat pump manager; flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switch ON / antifreeze; controlling range 5 to 30 °C; thermostat dial; temperature range limitation in the casing cover; operating voltage 24 V ~/50 Hz; switching capacity 24 V AC ~/1 A, can control up to 5 valve actuators (24 V~ closed when de-energised), IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dew point sensor TPF 341, for interrupting cooling operation when there is risk of condensate, optional connection (dew point sensors are not included in the scope of supply).

Dew point sensor

Flexible OCB, which sends a signal to the room temperature controller (RTK 601U) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).



RTK 601U

Order reference	Art.-Nr.	Short text	Width x Height x Depth mm	Weight kg	
RTK 601U	355610	Roomtemperature controller heating/cooling	82x 86 x 45	0.2	
TPF341	350980	Dewpoint sensor	38x 40	0.1	

When the dew point sensor comes into contact with condensation, the cooling of a room is interrupted by the motors attached to the room temperature controller.

Further room temperature controllers are listed in the chapter on control and regulation devices!

Heating and domestic hot water preparation package

Max. flow temperature for heating 58 °C
Casing colour white

Heat pump and WWSP 229E built-under hot water cylinder-



HPK..TEW

Consisting of compact brine-to-water heat pump, WWSP 229E built-under hot water cylinder and connection set for quick and easy connection of the individual components to the heating system.

Compact brine-to-water heat pump

Heat pump for heating purposes for indoor installation with integrated WPM EconPlus. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Integrated solid-borne sound insulation for direct connection to the heating system. Economiser for high coefficients of performance. Sensor monitoring of the refrigerating circuit for high degree of operational safety; integrated thermal energy metering (display of the calculated thermal energy volume for heating and domestic hot water preparation on the WPM EconPlus heat pump manager). The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Compact design with domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Built-in pipe heater (2 / 4 / 6 kW) can be used for reheating domestic hot water up to 60°C and as a stand-by for heating operation
- Electronically regulated heat circulating pump (efficiency class A, observe the free compression)
- DHW loading pump
- Expansion vessel (24 l) and safety module

Integrated brine components enable direct connection of the heat source:

- Brine circulating pump (note the free compression)
- Expansion vessel (8 l)
- Safety valve and pressure manometer

Built-under hot water cylinder

Nominal volume 227 l, tube heat exchanger (internal) – Heat exchanger area 2.9 m², steel cylinder (with special internal enamelling) with protective anode, polyurethane insulation with minimal stand-by losses. Soft starter (from 9 kW), integrated flow and return sensor; external sensor (standard NTC-2), dirt filter for brine circuit included in the scope of supply.

Brine circuit manifold must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25°C;

Refrigerant R407C Connection heating 1½ Heat source connection 1½

Order reference	Att.-Nr.	Heat output 1 compressor / COP B0/W35	Features	Width x Height x Depth mm	Weight kg
HPK7TEW	362590	6.8/ 4.1	Package SIK 7TE-2, WWSP 229E, VS TEW	650x 2150 x 690	111
HPK9TEW	362600	9.0/ 4.2	Package SIK 9TE-2, WWSP 229E, VS TEW		118
HPK11TEW	362610	11.7/ 4.2	Package SIK 11TE-2, WWSP 229E, VS TEW		122

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C) .
With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN 32: 80 m)! Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures! In heat pump heating systems, the underfloor heating can assume the function of the buffer tank connected in series if no individual room regulation is required or if regulation is carried out **based on the room temperature**. In this case, the heating surface of the reference room must guarantee the minimum heating water flow rate.

Reference room regulation

Smart RTC (Room Temperature Controller)



RT Econ

Reference room controller for use in combination with compact brine-to-water heat pumps HPK 7, 9 and 11TEW. The controller measures the temperature difference between the actual room temperature and the set temperature, and communicates this to the heat pump manager. The return set temperature is calculated on the basis of this difference. The ~230 V voltage supply (2-core) and the bus cable (2-core, screened) must be provided by the customer.

Additional functions:

- „Operating mode“ button – switches between automatic and summer operating mode
- „Rapid heating“ button – 20, 40 and 60-minute rapid heating (blocks DHW)
- Warning signal displayed if a heat pump fault occurs

Order reference	Att.-Nr.	Features	Width x Height x Depth mm
RT Econ U	362660	Flush-mounting version	86x 86 x 28
RT Econ A	363340	Surface-mounting version	143x 86 x 36

The reference room must be a living area which is permanently heated!

Passive cooling station for WPM EconPlus

Passive cooling station

Module for passive cooling via borehole heat exchangers. Consisting of heat exchanger, brine circulating pump, temperature sensor, passive cooling controller and enclosed 3-way distribution valve (DN25) with electrothermal actuator. Cooling operation mode is added to the existing heat pump manager by an electronic connection between the heating and cooling controller. The components are permanently mounted in a white sheet metal casing, which can be mounted vertically or horizontally.

Order reference	Art.-Nr.	Short text	Br device type	Width x Height x Depth mm	Weight kg	
PKS 14 Econ	362930	Passive cooling station with cooling module	HPK – 11TEW SI 22TU SI 30 – 75TER+	650x 400 x 320	30	

PKS..

Basic package for heating – low-temperature

Max. flow temperature for heating 58°C
Casing colour white

Heat pump and buffer tank

Consisting of compact brine-to-water heat pump, built-under buffer tank PSP 100E and connection set VSH KS for quick and easy connection of the individual components to the heating system.

Brine circuit manifold must be ordered separately.

Order reference	Art.-Nr.	Br device type	Heat output kW	Width x Height x Depth mm	Weight kg	
HPK7TE	353420	SIK7TE	6.8	652x 1660 x 688	238	
HPK9TE	353430	SIK9TE	9.0		239	
HPK11TE	353440	SIK11TE	11.7		250	
HPK14TE	353450	SIK14TE	14.4		262	

Heat output acc. to EN 255 at B0/W35 (B0 = brine inlet temp. 0°C, W35 = heating water outlet temp. +35°C)
The descriptions of the individual components can be found on the next pages!

HPK7-14TE

Basic package for heating – high-temperature

Max. flow temperature for heating 70°C
Casing colour white

Heat pump and buffer tank

Consisting of compact brine-to-water heat pump, built-under buffer tank PSP 100E and connection set VSH KS for quick and easy connection of the individual components to the heating system.

Brine circuit manifold must be ordered separately.

Order reference	Art.-Nr.	Br device type	Heat output kW	Width x Height x Depth mm	Weight kg	
HPKH6TE	356150	SIKH6TE	6.4	652x 1660 x 688	254	
HPKH9TE	356160	SIKH9TE	9.3		264	

Heat output acc. to EN 255 at B0/W35 (B0 = brine inlet temp. 0°C, W35 = heating water outlet temp. +35°C).
The descriptions of the individual components can be found on the next pages!

HPKH6/9TE

Passive cooling station and connecting set

Passive cooling station

Module for passive cooling via borehole heat exchangers. Consisting of heat exchanger, brine circulating pump, temperature sensor, passive cooling controller and enclosed 3-way distribution valve (DN25) with electrothermal actuator. Cooling operation mode is added to the existing heat pump manager by an electrical connection between the heating and cooling controller; (software update may be necessary). The components are permanently mounted in a white sheet metal casing, which can be mounted vertically or horizontally.

Order reference	Art.-Nr.	Short text	Br device type	Width x Height x Depth mm	Weight kg	
PKS14	342460	Passive cooling station with cooling controller	SI(H) SIK(H)	650x 400 x 320	30	
VSPKS	348630	Connection hose kit for passive cooling station	VSHKS with PKS		17	

The descriptions of the individual components can be found on the next pages!

PKS..

VSPKS

Supplementary package for DHW preparation

Hot water cylinder



HPK(H) ... WWSP 442E

The 400 l hot water cylinder is heated by the heat pump for heating purposes and offers convenient hot water preparation, also during longer shut-off times. It matches the height and design of the compact brine-to-water heat pump with built-under buffer tank.

Order reference	Art.-Nr.	Short text	Features	Width x Height x Depth mm	Weight kg	
WWSP TE	353460	Supplementary package for DHW preparation	Domestic hot water preparation with short reheating times and adjustable time programs; sales package consisting of WWSP 442 E hot water cylinder with UP 80 circulating pump for domestic hot water preparation and WSW KS hot water connection kit.	650x 1660 x 680	190	

The descriptions of the individual components can be found on the next pages!

Supplementary package for DHW preparation

Hot-water temp. up to max. 60 °C

Lower operating limit heat source (heating operation) 8 °C

Upper operating limit heat source (heating operation) 35 °C



AWP 30HLW

The hot water heat pump functions independently of the heat pump for heating purposes by using waste heat from the installation location and produces DHW temperatures up to max. 60 °C in heat-pump-only operation.

Order reference	Art.-Nr.	Short text	Features	Width x Height x Depth mm	Weight kg	
AWP 30HLW	351390	Hot water heat pump with sheet steel casing, air duct connection and additional heat exchanger	Hot water preparation using active heat extraction from indoor air. Recommended temperature of the room in which the system is installed is approx. 15 °C.	660x 1700 x 700	175	

The descriptions of the individual components can be found on the next pages! The compact domestic ventilation unit (exhaust air, LWP 300W) is available in the same design with integrated DHW preparation!

Built-under hot water cylinder and connection set

Built-under hot water cylinder

Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen heat exchanger area 2.9 m² smooth pipe (internal), heating connection 1 1/4" external thread, hot water connection 1" external thread, circulation connection 3/4" internal thread.

Connection set

Hose set for easy connection of the compact brine-to-water heat pump and the built-under hot water cylinder to the heating systems. Consisting of 2 corrugated stainless steel pipes with high-and-low temperature insulation, 2 elbow unions with manual air bleeds and an installation option for the hot water circulating pump (pump not included in the scope of supply).



WWSP 229E

Order reference	Art.-Nr.	Short text	for device type	Width x Height x Depth mm	Weight kg	
WWSP 229E	353380	Built-under hot water cylinder	up to SI(KH) 9	650x 1040 x 680	110	
VSW229	356050	Connection set, hot water	SI(KH) with WWSP 229E			

Can be used in service areas with short shut-off times or reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Low-temperature brine-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Compact design



SIK7TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Integrated brine components enable direct connection of the heat source:

- Brine circulating pump (note the free compression)
- Expansion vessel (8 l)
- Safety valve and pressure manometer

Sound-optimised through insulated metal casing and double vibration-isolated compressor. Integrated solid-borne sound insulation for direct connection to the heating system. Economiser for high coefficients of performance. Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Heat circulating pump (note the free compression)
- Overflow valve and safety module
- Expansion vessel (24 l)

Soft starter (from SI(K) 9 upwards), integrated flow and return sensors; external sensor (standard NTC-2), dirt filter and large-capacity breather (1½") with micro air bubble deposition for brine circuit included in the scope of supply.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25°C;

Refrigerant R407C Connection heating 1½" Heat source connection 1½"

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
SIK11ME	352990	11.8/ 4.4 (4.2)	1/N/PE~230 V, 50 Hz	650x 1115 x 680	191	
SIK16ME	353000	15.8/ 4.2 (4.0)			203	
SIK7TE	352810	6.9/ 4.3 (4.1)	3/N/PE~400 V, 50 Hz		179	
SIK9TE	352820	9.2/ 4.4 (4.2)			180	
SIK11TE	352830	11.8/ 4.4 (4.2)			191	
SIK14TE	352840	14.5/ 4.5 (4.3)			203	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0°C, W35 = heating water outlet temperature +35°C) .

With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN 32: 80 m)!

Hgh-temperature brine-to-water heat pump

Max. flow temperature for heating 70 °C
Casing colour white

Compact design with high coefficients of performance



SIKH6/9TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Integrated brine components enable direct connection of the heat source:

- Brine circulating pump (note the free compression)
- Expansion vessel (8 l)
- Safety valve and pressure manometer

Sound-optimised through insulated metal casing and double vibration-isolated compressor. Integrated solid-borne sound insulation for direct connection to the heating system. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Compact design with optional domestic hot water preparation and integrated components for direct connection of an unmixed heating circuit (must not be used for bivalent systems):

- Heat circulating pump (note the free compression)
- Overflow valve and safety module
- Expansion vessel (24 l)

Soft starter (from SI(K) 9 upwards), integrated flow and return sensors; external sensor (standard NTC-2), dirt filter and large-capacity breather (1½") with micro air bubble deposition for brine circuit included in the scope of supply.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25°C Refrigerant

R134a Connection heating 1½" Heat source connection 1½"

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
SIKH6TE	356070	6.4/ 4.7 (4.5)	3/N/PE~400 V, 50 Hz	652x 1115 x 688	180	
SIKH9TE	356080	9.4/ 4.7 (4.5)			203	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0°C, W35 = heating water outlet temperature +35°C). phase out

The maximum flow temperatures (up to 70 °C) are available for DHW preparation all year round, and allow DHW temperatures of up to 60 °C to be achieved without electrical reheating using a flange heater.

Design built-under buffer tank



PSP100E

Nominal content 100 l; in brine-to-water heat pump design to enable space-saving installation on top of the built-under buffer tank; polyurethane insulation for minimal downtime losses (can be used for heating and cooling); 1½" bush for immersion heaters (up to CTHK 635); 1¼" heating water connections; colour: white; brown red design screen.

Order reference	Art.-Nr.	Short text	for device type	Width x Height x Depth mm	Weight kg	
PSP100E	353360	Built-under buffer tank	SIK(H) 7 – 14 SI(H) 5 – 17	650x 550 x 653	54	

Design hot water cylinder



WWSP 442E

Nominal content 400 l, in brine-to-water heat pump design, tube heat exchanger (internal), three supporting feet, steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimal stand-by losses (approx. 2.7 kWh/24h), integrated temperature sensor for connection to the heat pump manager, colour white, brown red design screen.

Order reference	Art.-Nr.	for device type	Usable capacity l	Heat exchanger surface area m²	Connection heating "	Connection circulation "	Connection hot water "	Width x Height x Depth mm	Weight kg	
WWSP 442E	353370	SIK – 14 SIKH 6 – 9 SI(H) 20 – 30	353	4.2	1¼	¾	1	650x 1660 x 680	187	

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Design built-under hot water cylinder



WWSP 229E

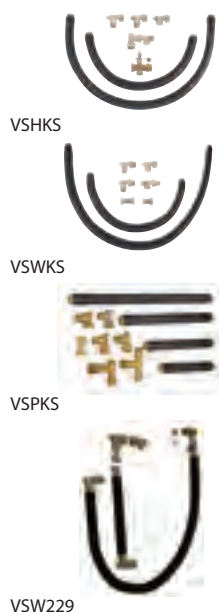
Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen
Permissible operating pressure 10 bar; Flange TK150/DN110 ;

Order reference	Art.-Nr.	for device type	Usable capacity l	Heat exchanger surface area m²	Connection heating "	Connection circulation "	Connection hot water "	Width x Height x Depth mm	Weight kg	
WWSP 229E	353380	up to SI(KH) 9	206	2.9	1¼	¾	1	650x 1040 x 680	110	

Recommended for service areas without shut-off times or with reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Compact brine-to-water heat pump connection set



Order reference	Art.-Nr.	for device type	Short text	Features	
VSHKS	343110	SIK(H)	Heating connection set	Hose set for easy connection of the compact brine-to-water heat pump and built-under buffer tank to heating system (minimum distance from wall 20 cm). Consisting of four elbow unions with three manual air bleeds, buffer connection with filling and drain cocks and two corrugated stainless steel pipes with high-and-low temperature insulation. 1" internal thread connection to the heating system.	
VSWKS	343120	VSHKS with WWSP	Hot water expansion kit	Hot water extension hose kit, to enable the use of the heating connection kit (VSH KS) in addition to the hot water cylinder connection and a circulating pump. Consisting of 3 elbow unions with 2 manual air bleeds, 1 tee joint, pump shut-offs for the hot water circulating pump (pump not included in the scope of supply) and 2 corrugated stainless steel pipes with high-and-low temperature insulation.	
VSPKS	348630	VSHKS with PKS	Passive cooling station extension hose kit for passive cooling station	Passive cooling station extension hose kit, to enable the use of the heating connection kit (VSH KS) in addition to the heating and brine circuit connection of the passive cooling station PKS 14, situated on the compact brine-to-water heat pump. Consisting of 2 elbow unions with manual air bleeds, crosspiece and 4 corrugated stainless steel pipes with high-and-low-temperature insulation.	
VSW229	356050	SIK(H) with WWSP 229E	Connection set, hot water	Hose set for easy connection of the compact brine-to-water heat pump and the built-under hot water cylinder to the heating systems. Consisting of 2 corrugated stainless steel pipes with high-and-low temperature insulation, 2 elbow unions with manual air bleeds and an installation option for the hot water circulating pump (pump not included in the scope of supply).	

Low-temperature brine-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Universal design



SI5TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Economiser for high coefficients of performance. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Soft starter, load contactor for brine circulating pump, integrated flow and return flow sensor; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C;

Refrigerant R407C Connection heating 1 1/4" Heat source connection 1 1/4".

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
SI5TE	352850	5.3/ 4.3 (4.1)	3/N/PE~400 V, 50 Hz	650x 805 x 462	109	
SI7TE	352860	6.9/ 4.3 (4.1)			111	
SI9TE	352870	9.2/ 4.4 (4.2)			118	
SI11TE	352880	11.8/ 4.4 (4.2)			122	
SI14TE	352890	14.5/ 4.5 (4.3)			130	
SI17TE	352900	17.1/ 4.6 (4.4)			133	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C) .

Low-temperature brine-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Universal design



SI5ME

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Economiser for high coefficients of performance. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Soft starter (from 9 kW), integrated flow and return sensor; external sensor (standard NTC-2), dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C Refrigerant

R407C Connection heating 1 1/4" Heat source connection 1 1/4".

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
SI5ME	353010	5.0/ 4.0 (3.8)	1/N/PE~230 V, 50 Hz	650x 805 x 462	109	
SI7ME	353020	6.4/ 3.9 (3.7)			111	
SI9ME	353030	9.3/ 4.0 (3.8)			118	
SI11ME	353040	11.0/ 4.0 (3.9)			122	
SI14ME	353050	15.0/ 4.1 (3.9)			130	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C) .

High-temperature brine-to-water heat pump

Max. flow temperature for heating 70 °C
Casing colour white

Universal design with high coefficients of performance



SIH6TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C;

Refrigerant R134a Connection heating 1 1/4" Heat source connection 1 1/4"

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
SIH6ME	355170	6.2/ 4.3 (4.1)	1/N/PE~230 V, 50 Hz	650x 805 x 462	118	
SIH9ME	355180	9.1/ 4.2 (4.0)			130	
SIH11ME	355190	10.8/ 4.6 (4.5)			133	
SIH6TE	355140	6.2/ 4.6 (4.5)	3/N/PE~400 V, 50 Hz		118	
SIH9TE	355150	9.0/ 4.5 (4.4)			130	
SIH11TE	355160	11.2/ 4.7 (4.5)			133	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C) .

The maximum flow temperatures (up to 70 °C) are available for DHW preparation all year round, and allow DHW temperatures of up to 60 °C to be achieved without electrical reheating using a flange heater.

Brine-to-water heat pump connection kit



VSHBS

Hose set for connecting a heat pump to the KPV 25 compact manifold or the VTB 25 manifold bar. The set contains two flexible Wellflex pipes with high-and-low temperature insulation for fast and easy installation (can also be used for connecting the brine circuit).

Order reference	Art.-Nr.	for device type	
VSHBS	347790	SI(H) 5 – SI 17 heating circuit SI(H) 5- SI 11 brine circuit	

Design built-under buffer tank



PSP100E

Nominal content 100 l; in brine-to-water heat pump design to enable space-saving installation on top of the built-under buffer tank; polyurethane insulation for minimal downtime losses (can be used for heating and cooling); 1 1/2" bush for immersion heaters (up to CTHK 635); 1 1/4" heating water connections; colour: white; brown red design screen.

Order reference	Art.-Nr.	Short text	for device type	Width x Height x Depth mm	Weight kg	
PSP100E	353360	Built-under buffer tank	SI(KH) 7 – 14 SI(H) 5 – 17	650x 550 x 653	54	

Design built-under hot water cylinder



WWSP 229E

Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen
Permissible operating pressure 10 bar; Flange TK150/DN110 ;

Order reference	Art.-Nr.	for device type	Usable capacity l	Heat-exchanger surface area m²	Connection heating "	Connection circulation "	Connection hot water "	Width x Height x Depth mm	Weight kg	
WWSP 229E	353380	up to SI(KH) 9	206	2.9	1 1/4	3/4	1	650x 1040 x 680	110	

Recommended for service areas without shut-off times or with reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Low-temperature brine-to-water heat pump

Max. flow temperature for heating 58°C
Casing colour white

Universal design



SI22TU

Heat pump for heating purposes for indoor installation with integrated WPM EconPlus. Variable connection options for brine and heating connections on the rear wall of the casing. Integrated solid-borne sound insulation for direct connection to the heating system. Sound-optimised through insulated metal casing and double vibration-isolated compressor. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Sensor monitoring of the refrigerating circuit for high degree of operational safety; integrated thermal energy metering (display of the calculated thermal energy volume for heating and domestic hot water preparation on the WPM EconPlus heat pump manager). The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Soft starter, load contactor for brine circulating pump, integrated flow and return flow sensor; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25°C;

Refrigerant R407C Connection heating 1 1/4" Heat source connection 1 1/2"

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
SI22TU	362340	22.5/ 4.5 (4.4)	3/N/PE~400 V, 50 Hz	650x 845 x 665	185	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0°C, W35 = heating water outlet temperature +35°C) .

High-efficiency brine package for brine-to-water heat pump

with one performance level

High-efficiency brine circuit accessory package consisting of a pre-assembled connection module (expansion vessel connection, quick-vent valve, 3 bar safety valve and pressure gauge) with cap valve that can be shut off for easy installation of the SWPR 200 low-pressure controller for the leakage monitoring of the brine circuit (available as special accessories), 18 litre / 0.5 bar admission pressure expansion vessel, ball valves, large-capacity breather with micro air bubble deposition and electronically-controlled brine pump with 0 – 10 V output signal (energy efficiency class A) for ground heat collectors according to the planning documentation (without brine circuit manifold and pipework). If the dimensions deviate or if borehole heat exchangers are used, the free compression must be checked.

Order reference	Art.-Nr.	br device type	Circulating pump	Weight kg	
SZB220E	362840	SI22TU	Strabs 30/1-12	23	

With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN 32: 80 m)!



SZB:Breather



SZB: Expansion vessel

Brine package for brine-to-water heat pump

with one performance level

Brine accessory package for ground heat collectors consisting of premounted safety module, expansion vessel 18l/0.5 bar admission pressure, 1 1/2" ball valves, large-capacity breather with micro air bubble deposition 1 1/2" and brine circulating pump (without brine circuit manifold and pipework).

Order reference	Art.-Nr.	br device type	Circulating pump	Weight kg	
SZB680	336680	SI 5 / SIH 6 / SI 7	Tp-S 25/7.5	24	
SZB690	336690	SI(H) 9, SI 11, SI 14			
SZB700	336700	SI17	Tp-S 30/10	21	
SZB710	336710	SI21	CHI4-20	25	

phase out: SZB 710

With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN 32: 80 m)!



SZB: Safety module



SZB:Breather

Elasticated sound insulation strip

For solid-borne sound insulation of heat pumps for indoor installation and compensation of floor unevenness; strip-shaped support for the base frame; 12 mm thick (deformation approx. 1 mm); max. load 140 kg/RM; 2.5 m long (can be cut to appropriate length), colour green.

Order reference	Art.-Nr.	length mm	Width x Height mm	Weight kg	
SYL 250	352260	2500	30x 12	0.3	



SYL 250

Low-temperature brine-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Universal design with two performance levels



SI24-37TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for service work from the front, no minimum clearances required on the sides. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
 - Distribution systems with unmixed and mixed heating circuits
- Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package and brine circuit manifold must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C;
Refrigerant R404A Connection voltage 3/N/PE-400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Heat output with 2 compressors / COP B0/W35	Width x Height x Depth mm	Weight kg	
SI24TE	352910	12.5/ 4.4 (4.3)	24.0/ 4.3 (4.1)	1000x 1440 x 775	282	
SI30TE	355640	14.4/ 4.2 (4.1)	31.2/ 4.6 (4.3)		365	
SI37TE	352920	17.0/ 4.2 (4.4)	37.2/ 4.6 (4.3)		371	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C) .

Design hot water cylinder



SI(HK) with WWSP 442E

Nominal content 400 l, in brine-to-water heat pump design, tube heat exchanger (internal), three supporting feet, steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimal stand-by losses (approx. 2.7 kWh/24h), integrated temperature sensor for connection to the heat pump manager, colour white, brown red design screen.

Permissible operating pressure 10 bar; Flange TK150/DN110 ;

Order reference	Art.-Nr.	for device type	Usable capacity l	Heat exchanger surface area m ²	Con- nection heating "	Con- nection circu- lation "	Con- nection hot water "	Width x Height x Depth mm	Weight kg	
WWSP 442E	353370	SIK - 14 SIKH 6 - 9 SI(H) 20 - 30	353	4.2	1 ¼	¾	1	650x 1660 x 680	187	

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Low-temperature brine-to-water heat pump

Max. flow temperature for heating 58 °C
Casing colour white

Universal design with two performance levels



SI50-130TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for servicing from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
 - Distribution systems with unmixed and mixed heating circuits
- Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C;
Refrigerant R404A Connection voltage 3/N/PE-400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Heat output with 2 compressors / COP B0/W35	Width x Height x Depth mm	Weight kg	
SI50TE	352930	23.0/ 4.4 (4.2)	46.7/ 4.5 (4.3)	1350x 1890 x 775	486	
SI75TE	352940	37.6/ 4.3 (4.1)	75.2/ 4.4 (4.2)		571	
SI100TE	352950	48.4/ 4.6 (4.3)	96.3/ 4.6 (4.4)		652	
SI130TE	352960	63.3/ 4.2 (4.1)	125.8/ 4.3 (4.1)		860	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C). A water-to-water heat pump must be used if borehole heat exchangers are used which work using water as the heat transfer medium!

In combination with borehole heat exchangers, brine-to-water heat pumps can also be used for passive cooling. SI 30TE and SI 75TE are also available as reversible heat pumps for active cooling!

Hgh-temperature brine-to-water heat pumps

Max. flow temperature for heating 70 °C
Casing colour white

Universal design with two performance levels



SIH20TE



SIH40TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for service work from the front, no minimum clearances required on the sides. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High COPs through economiser and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
 - Distribution systems with unmixed and mixed heating circuits
- Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Brine package must be ordered separately.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C;
Refrigerant R134a Connection voltage 3/N/PE-400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Heat output with 2 compressors / COP B0/W35	Width x Height x Depth mm	Weight kg	
SIH20TE	352970	11.8/ 4.8 (4.6)	21.8/ 4.7 (4.4)	1000x 1660 x 775	307	
SIH40TE	352980	18.6/ 4.4 (4.1)	36.6/ 4.4 (4.1)	1350x 1890 x 775	502	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C) . The maximum flow temperatures (up to 70 °C) are available for DHW preparation all year round, and allow DHW temperatures of up to 60 °C to be achieved without electrical reheating using a flange heater.

Connecting flange for heating and brine circuits

Coupling from the outer thread of the heat pump to a standard flange (DIN 2501).



AF 40 ... 80

Order reference	Art.-Nr.	Connection heating /	Nominalwidth	
AF40	351900	1½	DN40	
AF50	351910	2	DN 50	
AF65	351920	2½	DN65	
AF80	351930	3	DN 80	

Brine package for brine-to-water heat pump

with two performance levels

Brine accessory package for ground heat collectors consisting of membrane safety valve, large-capacity breather with micro air bubble deposition, low-noise brine circulating pump with flange connection, manometer, expansion vessel, cap valve, ball valves, couplings and seals.

Order reference	Art.-Nr.	Br device type	Expansionvessel l	Large-capacity breather "	Circulating pump	
SZB250	352490	SI21/24 SIH 20	18l	1½	Tp-S 40/10	
SZB300	355990	SI30		2		

With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN 32: 80 m)!



SZB:Breather

SZB: Expansion vessel

Brine package for brine-to-water heat pump

Flange connection

Brine accessory package for ground heat collectors consisting of membrane safety valve, large-capacity breather with micro air bubble deposition and flange connection, low-noise brine circulating pump with flange connection, manometer, expansion vessel, cap valve, ball valves, couplings and seals.

Order reference	Art.-Nr.	Br device type	Expansionvessel l	Large-capacity breather	Circulating pump	
SZB400	352500	SI37 / SIH 40	18l	DN50	Typ-S 40/10	
SZB500	352270	SI50	25l	DN65	Typ-S 50/10	
SZB750	352280	SI75	35l	DN80	Typ-S 65/13	
SZB1000	352290	SI100	50l	DN100		
SZB1300	352300	SI130			Typ-S 65/15	

With borehole heat exchangers, the free compression values in the device information are to be adhered to (max. heat exchanger depth at DN 32: 80 m)!



SZB500

Connection package brine manifold

The AP SVT connection package makes the connection of a maximum of 8 circuits possible.
The AP SVT 16 connection package makes the connection of a maximum of 2 x 8 circuits possible using a tee joint.

Order reference	Art.-Nr.	Features	Weight kg	
APSVT	348900	Contains two 1½" ball valves, two end caps with seals 2" and two filling and drain cocks; 1½" internal thread connection to the heat pump.	3	
APSVT16	356060	Connection package brine manifold consisting of: 2 ball valves 2"; 2 tee joints 2"; 4 end caps with seals 2"; 4 filling and drain cocks; heat pump connections 2" internal thread.	4	



APSVT



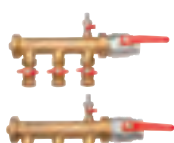
AP SVT 16

Brine circuit manifold

Brine manifold for ball valves (1" internal thread), brine collector (1" external thread), up to max. eight circuits can be screwed together (flat sealing), MS58 material.

Connection package AP SVT up to max. eight circuits or AP SVT 16 up to max. 2 x 8 circuits must be ordered separately!

Order reference	Art.-Nr.	Number of brine circuits	Heatsource connection "	Length mm	Weight kg	
SVT 200	348910	2	2	160	4.0	
SVT 300	348920	3		240	4.2	
SVT 400	348930	4		320	5.1	



SVT 300 with AP SVT



SVT 400

Brine circuit low pressure controller

Pipe assembly 1½" internal thread/external thread with connecting plug for installation in the brine circuit. When pressure loss occurs in the brine circuit, a digital blocking signal is transmitted to the heat pump manager. The built-in type "PS3-W" pressure controller complies with the standard DIN 32 733 / EN 12 263 (type examination).

Order reference	Art.-Nr.	Heatsource connection "	Weight kg	
SWPR500	337500	1½	1.1	
SWPR200	359470	¾	0.6	

A brine low pressure controller is only necessary if required by the authorities!



SWPR500

Brine circuit antifreeze

Pure monoethylene glycol without anticorrosive for mixing with water, percentage of antifreeze 25 volume-% for frost protection down to -14°C.

Order reference	Art.-Nr.	Nominal volume l	Weight kg	
AFN825	328610	20	22	
AFN824	324610	200	220	



AFN825

Water-to-water heat pump with stainless steel coil heat exchanger

Max. flow temperature for heating 55 °C
Casing colour white



WI9-27TE

Heat pump for indoor installation with integrated regulation WPM 2007 plus. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for the ground water and heating connections on the rear wall of the casing. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Economiser for high coefficients of performance. Integrated corrosion-proof and freeze-proof stainless steel coil heat exchanger. Universal design with optional DHW preparation and the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter (from WI 14), integrated flow rate switch and load contactor for a well water pump; flow sensor, return flow sensor, external sensor (standard NTC-2) and dirt filter for ground water included in the scope of supply.

Lower operating limit heat source (heating operation) 7 °C Upper operating limit heat source (heating operation) 25 °C Refrigerant R407C Connection heating 1 1/4" Heat source connection 1 1/4"

Order reference	Art.-Nr.	Heat output with 1 compressor / COP W10/W35	Connection voltage	Width x Height x Depth mm	Weight kg	
WI9ME	353340	8.3/ 5.1 (4.8)	1/N/PE~230 V, 50 Hz	650x 1445 x 575	156	
WI14ME	353350	13.6/ 5.0 (4.7)			165	
WI9TE	353120	8.3/ 5.1 (4.9)	3/N/PE~400 V, 50 Hz		156	
WI14TE	353130	13.6/ 5.2 (5.0)			168	
WI18TE	353140	17.1/ 5.3 (5.2)			187	
WI22TE	353150	21.5/ 5.5 (5.3)			189	
WI27TE	353160	26.4/ 5.1 (4.9)			259	

Heat output and COP acc. to EN255 (EN 14511) at W10/W35 (W10 = ground water inlet temp. +10 °C, W35 = heating water outlet temp. +35 °C).

Important information for coil heat exchangers:

at water temperatures below 13 °C, no water analysis with regard to corrosion is necessary.

Note for heat source systems:

If the limits for iron (Fe up to 0.2 mg/l) or manganese (Mn up to 0.1 mg/l) there is danger of ochre sedimentation of the heat source system. This is also true for coil heat exchangers.

High-efficiency water-to-water heat pumps with two performance levels

Max. flow temperature for heating 58 °C
Casing colour white



WI50TU



WI100TU

Water-to-water heat pump for indoor installation with integrated WPM EconPlus regulation and two compressors for output reduction when operating at partial load. Variable connection options for the water and heating connections on the rear wall of the casing. Access for service work from the front, no minimum clearances required on the sides. Sound-optimised through insulated metal casing and double vibration-isolated compressor. Integrated solid-borne sound insulation for direct connection to the heating system. High COPs through economiser, electronic expansion valve and compliance with the requirements of EN 14511 for larger volume flows on the heat consumption side. Sensor monitoring of the refrigerating circuit for high degree of operational safety; integrated thermal energy metering (display of the calculated thermal energy volume for heating and domestic hot water preparation on the WPM EconPlus heat pump manager). If the evaporation temperatures are too low (e.g. water flow too low) the heat pump switches off; no flow rate switch is necessary. A flow rate switch (available as a special accessory) can be installed for well systems with an uncertain water supply. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Universal design with the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- Distribution systems with unmixed and mixed heating circuits

Integrated soft starter, flow and return-flow sensors; external sensor (standard NTC-2) included in the scope of supply.

Order reference	Art.-Nr.	Heat output with 1 compressor / COP W10/W35	Heat output with 2 compressors / COP W10/W35	Width x Height x Depth mm	Weight kg
WI50TU	361650	26.3/ 6.3 (5.9)	49.0/ 6.1 (5.7)	1000x 1660 x 775	373
WI100TU	361660	52.8/ 6.1 (5.8)	98.5/ 5.6 (5.3)	1350x 1890 x 775	593

Heat output and COP acc. to EN255 (EN 14511) at W10/W35 (W10 = ground water inlet temp. +10 °C, W35 = heating water outlet temp. +35 °C).

A water-to-water heat pump must be used if borehole heat exchangers are used which work using water as the heat transfer medium!

A ground water analysis for the copper-soldered stainless steel heat exchanger is mandatory (see the project planning documentation)!

Low-temperature brine-to-water heat pump package

Max. flow temperature for heating 60 °C
Casing colour white

Using ground water as a heat source



WSI...

The package solution for indirect use of water as a heat source with intermediate heat exchanger and brine-to-water heat pump (intermediate circuit with monoethylene glycol). To utilise water as a heat source in case of pollution and/or to expand the range of operating temperatures to also include lower temperatures when water temperatures vary and thereby increase the operational safety of the heat generator. Consisting of brine-to-water heat pump, WTE stainless steel plate heat exchanger, SZB brine circuit accessory package and a safety thermostat (RAT 060I strap-on thermostat) in order to ensure that the heat exchanger does not freeze.

Order reference	Ait.-Nr.	heatpump	Heatexchanger	Brinecircuit accessories	Heat output with 2 compressors / COP at B7/W35	Weight kg	
WSI36TE	361540	SI30TE	WTE 30	SZB300	36/ 4.9	480	
WSI44TE	361550	SI37TE	WTE 37	SZB400	44/ 5.2	510	
WSI55TE	361560	SI50TE	WTE 50	SZB500	55/ 4.9	714	
WSI85TE	361570	SI75TE	WTE 75	SZB750	85/ 4.9	866	
WSI110TE	361580	SI100TE	WTE 100	SZB1000	113/ 5.1	963	
WSI150TE	361590	SI130TE	WTE 130	SZB1300	145/ 4.9	1266	

The descriptions of the individual components can be found on the next previous pages!

Heat output and COP in accordance with EN 14511 at B7/W35 (B7 = brine inlet temperature 7 °C, W35 = heating water outlet temperature +35 °C) .

Important information for stainless steel plate heat exchangers:

At water temperatures below 13 °C, no water analysis with regard to corrosion is necessary.

Note for heat source systems:

If the limit values for iron (Fe up to 0.2 mg/l) or manganese (Mn up to 0.1 mg/l) there is a danger of ochre sedimentation of the heat source system. This also applies to stainless steel heat exchangers. An online planner, which can be used to calculate the seasonal performance factor (including intermediate heat exchangers), is available at <http://www.dimplex.de/online-planer/wp-rechner/index.php?lang=en>

Hgh-temperature brine-to-water heat pump package

Max. flow temperature for heating 70 °C
Casing colour white

Using ground water as a heat source



WSI...

The package solution for indirect use of water as a heat source with intermediate heat exchanger and brine-to-water heat pump (intermediate circuit with monoethylene glycol). To utilise water as a heat source in case of pollution and/or to expand the range of operating temperatures to also include lower temperatures when water temperatures vary and thereby increase the operational safety of the heat generator. Consisting of brine-to-water heat pump, WTE stainless steel plate heat exchanger, SZB brine circuit accessory package and a safety thermostat (RAT 060I strap-on thermostat) in order to ensure that the heat exchanger does not freeze.

Order reference	Ait.-Nr.	heatpump	Heatexchanger	Brinecircuit accessories	Heat output with 2 compressors / COP at B7/W35	Weight kg	
WSIH26TE	361600	SIH20TE	WTE 20	SZB250	26/ 5.0	416	
WSIH44TE	361610	SIH40TE	WTE 40	SZB400	44/ 4.9	715	

The descriptions of the individual components can be found on the next pages!

Heat output and COP in accordance with EN 14511 at B7/W35 (B7 = brine inlet temperature 7 °C, W35 = heating water outlet temperature +35 °C) .

Important information for stainless steel plate heat exchangers:

At water temperatures below 13 °C, no water analysis with regard to corrosion is necessary.

Note for heat source systems:

If the limit values for iron (Fe up to 0.2 mg/l) or manganese (Mn up to 0.1 mg/l) there is a danger of ochre sedimentation of the heat source system. This also applies to stainless steel heat exchangers. An online planner, which can be used to calculate the seasonal performance factor (including intermediate heat exchangers), is available at www.dimplex.de/betriebskostenrechner.

Reversible brine-to-water heat pump package

Max. flow temperature for heating 55 °C
flow temperature cooling min. 8 °C
Casing colour white

Using ground water as a heat source



WSI...

The package solution for indirect use of water as a heat source with intermediate heat exchanger and brine-to-water heat pump (intermediate circuit with monoethylene glycol). To utilise water as a heat source in case of pollution and/or to expand the range of operating temperatures to also include lower temperatures when water temperatures vary and thereby increase the operational safety of the heat generator. Consisting of brine-to-water heat pump, WTE stainless steel plate heat exchanger, SZB brine circuit accessory package and a safety thermostat (RAT 060I strap-on thermostat) in order to ensure that the heat exchanger does not freeze.

Order reference	Ait.-Nr.	heatpump	Heatexchanger	Brinecircuit accessories	Heat output with 2 compressors / COP at B7/W35	Weight kg	
WSI34TER+	361620	SI30TER+	WTE 30	SZB300	34/ 4.2	480	
WSI77TER+	361630	SI75TER+	WTE 75	SZB750	77/ 3.8	953	

The descriptions of the individual components can be found on the next pages!

Heat output and COP in accordance with EN 14511 at B7/W35 (B7 = brine inlet temperature 7 °C, W35 = heating water outlet temperature +35 °C).

Cooling capacity in accordance with EN 14511 at B20/W10 (B20 = brine inlet temperature 20 °C, W10 = cooling water outlet temperature 10 °C).

The use of waste heat for DHW preparation produces high coefficients of performance in cooling operation!

Important information for stainless steel plate heat exchangers:

At water temperatures below 13 °C, no water analysis with regard to corrosion is necessary.

Note for heat source systems:

If the limit values for iron (Fe up to 0.2 mg/l) or manganese (Mn up to 0.1 mg/l) there is a danger of ochre sedimentation of the heat source system. This also applies to stainless steel heat exchangers.



WTE 20

Plate heat exchanger for the use of polluted heat sources

Screwed stainless steel plate heat exchanger. Max. operating pressure 10 bar, max. temperature 80°C. Intermediate heat exchanger for polluted heat sources or heat sources with poor water quality. Connection for the cold and warm side with external thread, exception: WTE 130 – connecting flange with rubber bushing.

Order reference	Art.-Nr.	for device type	Heatsource connection "	Width x Height x Depth mm	Weight kg	
WTE 20	358400	SI2 / SIH 20	1 1/4	200x 748 x 270	74	
WTE 30	358410	SI30		200x 748 x 320	80	
WTE 37	358420	SI37		200x 748 x 420	87	
WTE 40	358430	SI40TE	2	300x 994 x 437	143	
WTE 50	358440	SI50TE		300x 994 x 537	147	
WTE 75	358450	SI75			167	
WTE 100	358460	SI100TE			181	
WTE 130	358470	SI130	2 1/2	395x 946 x 443	284	

Delivery time 3 – 4 weeks!

The general water quality requirements according to the project planning manual for welded stainless steel coil heat exchangers apply. If, due to the quality of the water, an intermediate heat exchanger is required, brine-to-water heat pumps are usually used, in order to expand the range of operating temperatures to include lower temperatures (intermediate circuit with monoethylene glycol). **General information:** The screw-fixed stainless steel/titanium plate heat exchangers can, due to customs regulations, only be distributed within the borders of the EU.

Titanium plate heat exchanger

Heat source sea water



WTT ..

Screwed titanium plate heat exchanger for using corrosive heat sources (e.g. saline liquids such as sea water) in combination with brine-to-water heat pumps. Connecting flange for the cold and warm side with rubber bushing.

Order reference	Art.-Nr.	for device type	Heatsource connection "	Width x Height x Depth mm	Weight kg	
WTT 40	358480	SI40TE	2 1/2	395x 946 x 443	223	
WTT 50	358490	SI50TE			227	
WTT 75	358500	SI75			234	
WTT 100	358510	SI100TE			240	

Delivery time 6 – 8 weeks!

Note on the heat source system:

When the limit values for iron (Fe up to 0. 2 mg/l) or manganese (Mn up to 0. 1 mg/l) are exceeded, the heat source system is in danger of iron ochre sedimentation. This is also true for titanium heat exchangers. **General information:** The screw-fixed stainless steel/titanium plate heat exchangers can, due to customs regulations, only be distributed within the borders of the EU.

Passive cooling station with cooling controller



PKS..

Module for passive cooling via borehole heat exchangers. Consisting of heat exchanger, brine circulating pump, temperature sensor, passive cooling controller; 3-way distribution valve with electrothermal actuator included in the scope of supply. Cooling operation mode is added to the existing heat pump manager by an electronic connection between the heating controller and the cooling controller (where the software versions of the heating controller and the cooling controller differ, a software update is necessary and must be bought from after-sales service). The components are permanently mounted in a white sheet metal casing, which can be mounted vertically or horizontally.

Order reference	Art.-Nr.	for device type	Cooling capacity kW	Features	Width x Height x Depth mm	Weight kg	
PKS14	342460	SI(H) SIK(H)	14	Changeover valve: DN 25	650x 400 x 320	30	
PKS25	342470		25	Changeover valve: DN 40		32	
PKS 14 Econ	362930	HPR – 11TEW SI 22TU SI 30 – 75TER+	14	Changeover valve: DN 25		30	
PKS 25 Econ	362940		25	Changeover valve: DN 40		32	

Transferrable cooling capacity at a brine inlet temperature of approx. 10 °C and a cooling water inlet temperature of 20 °C!

Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

Passive cooling controller



WPM PK



WPM Econ PK

Wall-mounted cooling controller with temperature sensors to record the flow and return temperatures. The passive cooling controller adds cooling operation mode to the existing heat pump manager (where the software versions of the heating controller and the cooling controller differ, a software update is necessary (subject to a charge)). Both controllers are operated within the network and control a combined system for heating and passive cooling with brine-to-water or water-to-water heat pumps. The cooling capacity is transferred via a heat exchanger not included in the scope of supply. This heat exchanger must be configured according to the cooling capacity to be transferred, the volume flow and the water quality.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
WPM PK	348190	SS – 130TE WI 9 – 27TE	370x 340 x 90	4	
WPM Econ PK	360000	SS0 – 75TER+ SI 130TUR+ WI 50 – 100TU			

Start-up (subject to charge) by the after-sales service is required!

Plate heat exchanger, copper-soldered



WTU ...

Copper-soldered stainless steel plate heat exchanger. Max. operating pressure 25 bar, max. operating temperature 185 °C. As an intermediate heat exchanger for passive cooling. Connection for the cold and warm side with 2½" external thread.

Order reference	Art.-Nr.	Volume flow primary m³/h	Volume flow secondary m³/h	Cooling capacity kW	Heatsource connection "	Width x Height x Depth mm	Weight kg	
WTU 50	362370	16.1	14.3	50	2½	238x 611 x 145	40	
WTU 75	362380	24.1	21.4	75		238x 611 x 201	63	
WTU 100	362390	32.2	28.6	100		238x 611 x 257	80	
WTU 130	362400	41.9	37.1	130		238x 611 x 341	110	

Delivery time on request! Transferrable cooling capacity at a brine inlet temperature of approx. 10 °C and a cooling water inlet temperature of 20 °C!

The general water quality requirements according to the project planning manual for copper-soldered stainless steel plate heat exchangers apply.

Hydraulic passive cooling accessories



DWU..



ZWU..



ETS DWU

Order reference	Art.-Nr.	Pressure drop	Dimensions	Features	Weight kg	
DWU25	347760	1400Pa at 2,5m³/h	DN25	Change-over valve for switching the heat return flow in passive cooling operation. Essential accessories: Actuator ETS DWU.	1.2	
DWU40	347770	1400Pa at 3,5 m³/h	DN40		2.1	
ZWU25	348940	1400Pa at 1,3 m³/h	DN25	Two-way valve for blocking heat flow in passive cooling operation. Parallel cooling operation and DHW preparation is possible due to hydraulic separation of the cooling circuit. Essential accessories: Actuator ETS DWU.	0.7	
ZWU32	348950	1400Pa at 1,5 m³/h	DN32		1.1	
ETS DWU	347780			Electrothermal actuator for two-way valve and change-over valve. ~230V, 50 Hz, de-energised in heating operation, switching time approx. 3.5 min.	0.2	

Reversible brine-to-water heat pump

Max. flow temperature for heating 58 °C

flow temperature cooling min. 7 °C

Casing colour white

Optimised for cooling operation



SI11MER

Heat pump for heating and cooling with integrated regulation installed indoors. Variable connection options for brine and heating connections on the rear wall of the casing. Access for servicing from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High coefficients of performance due to compliance with EN 14511 for larger volume flows on the heat consumption side. Reversible refrigerating circuit with 2 performance levels. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C ;

Lower operating limit heat source (cooling operation) 5 °C; Upper operating limit heat source (cooling operation) 25 °C;

Refrigerant R407C Connection voltage 1/N/PE-230 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Cooling capacity with 1 compressors / EER B20/W18	Width x Height x Depth mm	Weight kg
SI 5MER	353070	4.8 / 3.9	6.4 / 5.3	650 x 805 x 462	115
SI 7MER	353080	6.3 / 3.9	8.4 / 5.2		117
SI 9MER	353090	9.1 / 3.9	11.9 / 5.2		124
SI 11MER	353100	11.4 / 4.0	13.9 / 5.2		128

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C).

Cooling capacity and COP acc. to EN 255 at B20/W18 (B20 = brine inlet temp. 20 °C; W18 = cooling water outlet temp. 18 °C).

Start-up should be carried out by authorised after-sales service personnel, especially for heating and cooling equipment!

Reversible brine-to-water heat pump

Max. flow temperature for heating 55 °C

flow temperature cooling min. 7 °C

Casing colour white

Optimised for cooling with waste heat recovery



SI30TER+

Heat pump for heating and cooling with integrated regulation installed indoors. The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Variable connection options for brine and heating connections on the rear wall of the casing. Access for service work from the front, no minimum clearances required on the sides. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High coefficients of performance due to compliance with EN 14511 for larger volume flows on the heat consumption side. Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Universal design with the option of flexible expansion for:

- bivalent operation (bivalent-renewable not possible)
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Integrated soft starter and load contactor for brine circulating pump, integrated flow and return flow sensors; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Lower operating limit heat source (heating operation) -5 °C Upper operating limit heat source (heating operation) 25 °C ;

Lower operating limit heat source (cooling operation) 5 °C; Upper operating limit heat source (cooling operation) 30 °C;

Refrigerant R404A Connection voltage 3/N/PE-400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Heat output with 2 compressors / COP B0/W35	Cooling capacity with 2 compressors / EER B20/W10	Width x Height x Depth mm	Weight kg
SI30TER+	355650	15.4 / 4.2 (4.2)	28.5 / 3.9 (3.8)	35.3 / 5.3	1000x 1660 x 775	385
SI75TER+	354480	34.0 / 3.9 (3.7)	66.4 / 3.6 (3.4)	75.5 / 4.5	1350x 1890 x 750	658

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0 °C, W35 = heating water outlet temperature +35 °C).

Cooling capacity and coefficient of performance according to EN 14511.

The use of waste heat for DHW preparation produces high coefficients of performance in cooling operation!

Reversible brine-to-water heat pump

Max. flow temperature for heating 58°C

Flow temperature cooling min. 7°C

Casing colour white

Optimised for heating and cooling with waste heat reco-



SI130TUR+

Heat pump for heating and cooling with integrated regulation installed indoors. Variable connection options for brine and heating connections on the rear wall of the casing. Access for servicing from the front, no minimum clearance required on the sides, accessible from underneath with a lift truck. A sound-optimised insulated metal casing and integrated solid-borne sound insulation with free-swinging compressor base plate, make direct connection with the heating system possible. High coefficients of performance due to compliance with EN 14511 for larger volume flows on the heat consumption side. Optimised heating and cooling operation via an external four-way reversing valve which is activated by the controller (special accessory). Reversible refrigerating circuit with additional heat exchanger for higher DHW temperatures in heating operation and waste heat recovery in cooling operation. Sensor monitoring of the refrigerating circuit for high degree of operational safety; integrated thermal energy metering (display of the calculated thermal energy volume for heating and domestic hot water preparation on the WPM EconPlus heat pump manager). The control panel is integrated into a brown-red design screen and can also be used as wired remote control using the wall mounting set (special accessories MS PGD). Universal design with the option of flexible expansion for:

- Bivalent or bivalent-renewable operating mode
- combined distribution systems for heating and cooling
- unmixed and mixed heating and cooling circuits
- Combination of active and passive cooling (special accessory)

Silent cooling via panel heating/cooling systems requires the use of the room climate control station (special accessory) to regulate the flow temperature on the basis of the air temperature and humidity of a reference room. Soft starter, load contactor for brine circulating pump, integrated flow and return flow sensor; external sensor (standard NTC-2) and dirt filter for brine circuit included in the scope of supply.

Lower operating limit heat source (heating operation) -5 °C; Upper operating limit heat source (heating operation) 25°C ;

Lower operating limit heat source (cooling operation) 10°C; Upper operating limit heat source (cooling operation) 30°C ;

Refrigerant R410A; Connection voltage 3/N/PE-400 V, 50 Hz

Order reference	Art.-Nr.	Heat output with 1 compressor / COP B0/W35	Heat output with 2 compressors / COP B0/W35	Cooling capacity with 2 compressors / EER B20/W9	Width x Height x Depth mm	Weight kg	
SI130TUR+	361770	57.6/ 4.5 (4.4)	108.5/ 4.3 (4.2)	129.0 / 5.6	1350x 1890 x 775	830	

Heat output and COP according to EN255 (EN 14511) at B0/W35 (B0 = brine inlet temperature 0°C, W35 = heating water outlet temperature +35°C).

Cooling capacity and coefficient of performance according to EN 14511.

If borehole heat exchangers which use water as their heat transfer medium are used, a water-to-water heat pump must be installed!

The SI 130TUR+ is also available upon request in a WI 140TUR+ version, which works with water as the heat source.

The performance values stated can only be achieved in combination with the external four-way valve available as an accessory!

Delivery time on request!

Four-way reversing valve, reversible brine to water heat pump

Special hydraulic accessories for cooling



WU 65

The four-way reversing valve (DN 65 flange or DN 80 flange) for integration into the heating flow allows optimised heating and cooling operation of the SI 130TUR+ reversible brine-to-water heat pump. Switching takes place via a pre-assembled electromotive actuator (1/N/PE ~230 V) which is activated by the WPM EconR heat pump manager.

Order reference	Art.-Nr.	for device type	Maximum volume flow m³/h	features	Weight kg	
WU 65	362760	SI130TUR+	20	Four-way reversing valve for switching from heating to cooling operation in flow and/or return. Actuator, 3-point control signal, 1/N/PE ~230 V, 50 Hz for short switching times.	15	
WU 80	362770		25		23	

Flow switch for rev. SI 130TUR+ brine-to-water heat pump

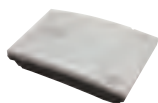


DFS80

DN 80 external thread/external thread pipe assembly with flow switch (switch point at 6.5 m³/h ±10%) for SI 130TUR+ brine-to-water heat pumps. Can be used for flow rate monitoring in the heating circuit and in the brine circuit.

Order reference	Art.-Nr.	for device type	Connection heating "	Weight kg	
DFS80	361840	SI130TUR+	3	3	

Room climate control station for temperature and humidity measurement



RKS WPM

This accessory is essential for silent cooling using panel heating/cooling systems. Connection to a cooling controller to control the flow temperature based on the measured room temperature and humidity via a reference room.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
RKS WPM	342220	WPM	127x 80 x 30	0.2	

Dew point monitor and dew point sensors

Dew point monitor

Switching relay for electronic evaluation of up to 5 connectable dew point sensors to interrupt cooling operation of the complete system in case of condensation at vulnerable points in the cooling distribution system; TPF 341 dew point sensors must be ordered separately; connection to the cooling controller; operating voltage 24 V~ / 50 Hz.

Dew point sensor

Flexible PCB which sends a signal to the dew point monitor (TPW WPM) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).



TPW WPM



TPF 341

Order reference	Art.-Nr.	Short text	for device type	Width x Height x Depth mm	
TPW WPM	350970	Dew point monitor	WPM	35x 86 x 60	
TPF 341	350980	Dew point sensor	RTK 601U	38x 40	

When the dew point sensor comes into contact with condensation, the cooling of the system is interrupted!

Heating/cooling ON/OFF room temperature controller

Room temperature controller

Electronic room temperature controller heating/cooling; switchable between "Heating" and "Cooling" operating modes using an external change-over contact of the heat pump manager; flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switch ON / antifreeze; controlling range 5 to 30 °C; thermostat dial; temperature range limitation in the casing cover; operating voltage 24 V ~/50 Hz; switching capacity 24 V AC ~/1 A, can control up to 5 valve actuators (24 V~ closed when de-energised), IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dew point sensor TPF 341, for interrupting cooling operation when there is risk of condensate, optional connection (dew point sensors are not included in the scope of supply).

Dew point sensor

Flexible OCB, which sends a signal to the room temperature controller (RTK 601U) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm²).



RTK 601U

Order reference	Art.-Nr.	Short text	Width x Height x Depth mm	Weight kg	
RTK 601U	355610	Room temperature controller heating/cooling	82x 86 x 45	0.2	
TPF 341	350980	Dew point sensor	38x 40	0.1	

When the dew point sensor comes into contact with condensation, the cooling of a room is interrupted by the motors attached to the room temperature controller.

Further room temperature controllers are listed in the chapter on control and regulation devices!

Built-under buffer tank



PSP100E

Order reference	Art.-Nr.	for device type	features	Width x Height x Depth mm	Weight kg	
PSP100E	353360	SIK(H) – 14 SI(H) 5 – 17	Nominal content 100 l; in brine-to-water heat pump design to enable space-saving installation on top of the built-under buffer tank; polyurethane insulation for minimal downtime losses (can be used for heating and cooling); 1½" bush for immersion heaters (up to CTHK 635); 1¼" heating water connections; colour: white; brown red design screen.	650x 550 x 653	54	
PSP140E	353970	LI 11 – LI 20 ..(R)	Nominal content 140 l; in air-to-water heat pump design to enable space-saving installation on top of the built-under buffer; polyurethane insulation with minimal downtime losses (can be used for heating and cooling), incl. 2 1½" bushes for immersion heaters (up to CTHK 636); 1" heating water connections; colour: white; brown red design screen.	750x 600 x 880	72	

Floor-mounted buffer tank

Permissible operating pressure 3 bar; Max. operating temperature 95 °C;



PSW100



PSW200



PSW500

Order reference	Art.-Nr.	for device type	features	Diameter x Height mm	Weight kg	
PSW100	351090	up to LI 11 up to LA 11	Nominal content 100 l, polyurethane insulation for minimal downtime losses (can be used for heating and cooling), incl. 2 bushes 1½" for immersion heaters (to CTHK 634), heating water connections 1".	512 x 850	32	
PSW200	339830	up to SI 37 up to WI 27	Nominal content 200 l, polyurethane insulation for minimal downtime losses (can be used for heating and cooling), incl. 3 bushes 1½" for immersion heaters (to CTHK 634), heating water connections 1¼", 3 supporting feet (adjustable).	600 x 1300	60	
PSW500	339210	up to LA 60 up to SI 75 up to WI 50	Universal buffer tank, nominal capacity 500 l, polyurethane insulation for minimal downtime losses (can be used for heating and cooling), incl. 3 bushes 1½" for immersion heaters (to CTHK 635), heating water connections 2½", flange DN 180 for installation of a RWT 500 ribbed tube heat exchanger.	700 x 1950	115	
PSW1000	361640	up to SI 130 up to WI 100 up to LA 60	Nominal volume 1000 litres, including six 1½" sleeves for immersion heaters (up to CTHK 636), three ½" immersion sleeves for temperature sensors, 2½" heating water connections and 3 supporting feet. Separate polyurethane insulation (100 mm insulation thickness) for low downtime losses, removable (can be used for heating), colour white aluminium (similar to RAL 9006); diameter (without insulation) 790 mm, tilting dimension (without insulation) 2018 mm.	790 x 1970	112	

To prevent condensate from forming on the buffer tank during cooling operation, the sleeves for the immersion heaters, the flange (handhole cover in the PSW 500) and all heating water connections must be insulated on site with an additional steam-resistant thermal insulation.

Immersion heater



CTHK ...

For electrical supplementary heating in mono-energy operation; consisting of individual heating elements with temperature controller, safety temperature limiter, degree of protection IP 54, 1½" external thread with plastic cover, fulfils the requirements of EN 60335, Part 1. Not suitable for enamelled steel hot water cylinders.

Order reference	Art.-Nr.	Connection voltage	Heatoutput kW	Immersion depth mm	Unheated length mm	Weight kg	
CTHK 630	363610	1/N/PE~230 V, 50 Hz	4.5	400	95	1.9	
CTHK 631	336180		2.0	250		1.4	
CTHK 632	335910		2.9			1.5	
CTHK 633	322140	3/N/PE~400 V, 50 Hz	4.5	350	110	1.7	
CTHK 634	322150		6 .0	450		1.8	
CTHK 635	322160		7.5	550		1.9	
CTHK 636	322170		9 .0	650		2.1	

Solar heat exchanger for universal buffer PSW 500



RWT 500

For connection of an external supplementary heating system with required system separation (e.g. solar) in connection with the PSW 500 universal buffer tank. Consisting of a flange cover with antitwist protection and 2.3 m² heat exchanger (for a solar collector area of up to approx. 10 m²), ¾" external thread connection, TK210/8.

Order reference	Art.-Nr.	for device type	Connection heating "	Transmission capacity kW	Weight kg	
RWT 500	339840	PSW500	¾"	9	11.1	

Immersion heater pipe assembly



HDLR450

Insulated pipe assembly for screwing in a 1½" immersion heater (CTHK 631, CTHK 632, CTHK 633 or CTHK 634); integration into the heat flow for volume flows up to 2.5 m³/h; 1¼" heating water connection; installation material for wall mounting included in the scope of supply.

Immersion heater (CTHK ...) must be ordered separately.

Order reference	Art.-Nr.	for device type	Weight kg	
HDLR450	337450	CTHK 631-634	5.0	

Pipe heater (radiator)



HCT 300

Insulated, built-in 3 kW radiator for heat flow (1" flat sealing), max. volume flow 1.5 m³/h, controlling range 20 – 75 °C, degree of protection IP44, safety temperature limiter, 16 A fuse.

Order reference	Art.-Nr.	Connection voltage	Heatoutput kW	Weight kg	
HCT 300	351210	1/N/PE~230 V, 50 Hz	3	3.5	

Hot water cylinder with foil cladding and temperature sensor



WWSP 332

Steel cylinder (special inside enamelling) with protection anode and 3 supporting feet, polyurethane insulation with minimal stand-by losses, temperature sensor for connection to the heat pump manager included in the scope of supply, colour white, heating connection 1½", hot water connection 1" external thread, circulation connection ".

Permissible operating pressure 10 bar; Flange TK150/DN110 ;

Order reference	Art.-Nr.	for device type	Features	Diameter x Height mm	Weight kg	
WWSP 332	346610	up to LI 20 excluding LI 16 up to LA 22 excluding LA 16 / LA 22HS up to SI 11 up to WI 14	Nominal content 300l, usable capacity 277 l, heat exchanger area 3,2 m² for a transmission capacity up to approx. 16 kW, stand-by loss approx. 2.4 kWh/24h	700 x 1294	130	
WWSP 880	337880	up to LI 28 excluding LIH 26TE up to LA 28 excluding LA 26HS up to SI 30 up to WI 22	Nominal content 400 l, usable capacity 350 l, heat exchanger area 4.2 m² for a transmission capacity up to approx. 20 kW, stand-by loss approx. 2.8 kWh/24h	700 x 1591	159	
WWSP 900	339220	up to LI(H) 28 up to LA 28 up to SI 50 up to WI 50	Nominal content 500 l, usable capacity 430 l, heat exchanger area 5.7 m² for a transmission capacity up to approx. 30 kW, stand-by loss approx. 3.3 kWh/24h	700 x 1920	180	

The solar station SST 25 can be used to support DHW preparation for all hot water cylinders.

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Solar hot water cylinders for heat pumps



WWSP 432 SOL

Solar domestic hot water cylinder made of steel (special enamelling inside) with protection anode, two internal bare-tube heat exchangers for solar and heating, thermometer, polyurethane insulation for minimal stand-by losses, colour white, TK150/DN110 flange. Permissible operating pressure 10 bar;

Order reference	Art.-Nr.	for device type	Features	Diameter x Height mm	Weight kg	
WWSP 432 SOL	361080	up to LI 20 excluding LI 16 up to LA 22 excluding LA 16 / LA 22HS up to SI 11 up to WI 14	400 l nominal volume, 346 l usable capacity, 3.2 m² heat exchanger area (heating), 1.3 m² heat exchanger area (solar), 2.9 kWh/ 24h stand-by loss, 1¼" solar and heating connections, 1" hot water connection, ¾" circulation connection	700 x 1631	182	
WWSP 540 SOL	361090	up to LI 28 excluding LIH 26TE up to LA 28 excluding LA 26HS up to SI 30 up to WI 22	500 l nominal volume, 427 l usable capacity, 4.0 m² heat exchanger area (heating), 1.6 m² heat exchanger area (solar), 3.2 kWh/ 24h stand-by loss, 1¼" solar and heating connections, 1" hot water connection, ¾" circulation connection	700 x 1961	218	

Design hot water cylinder



WWSP 442E

Nominal content 400 l, in brine-to-water heat pump design, tube heat exchanger (internal), three supporting feet, steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimal stand-by losses (approx. 2.7 kWh/24 h), integrated temperature sensor for connection to the heat pump manager, colour white, brown red design screen.

Order reference	Art.-Nr.	for device type	Usable capacity l	Heat exchanger surface area m ²	Con- nection heating "	Con- nection circulation "	Con- nection hot water "	Width x Height x Depth mm	Weight kg	
WWSP 442E	353370	SIH – 14 SIKH 6 – 9 SI(H) 20 – 30	353	4.2	1¼	¾	1	650x 1660 x 680	187	

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.

Design built-under hot water cylinder



WWSP 229E

Nominal capacity 227 l, in brine-to-water heat pump design to enable space-saving installation on the built-under buffer, tube heat exchanger (internal), steel cylinder (special inside enamelling) with protection anode, polyurethane insulation with minimum stand-by losses; integrated temperature sensor for connection to the heat pump manager, colour: white, brown red design screen
Permissible operating pressure 10 bar; Flange TK150/DN110 ;

Order reference	Art.-Nr.	for device type	Usable capacity l	Heat exchanger surface area m ²	Con- nection heating "	Con- nection circulation "	Con- nection hot water "	Width x Height x Depth mm	Weight kg	
WWSP 229E	353380	up to SI(KH) 9	206	2.9	1¼	¾	1	650x 1040 x 680	110	

Recommended for service areas without shut-off times or with reduced hot water consumption.

Note: A minimum buffer volume of the heating system of 10% of the heating water flow must be ensured either by a buffer tank or other suitable measures!

Flange heater for hot water cylinder



FLH60

For reheating and thermal disinfection; temperature controller adjustable from 30 °C to 80 °C; safety temperature limiter, can be used for all hot water cylinders (WWSP), installation depth 360 mm, 105 mm length unheated, diameter 185 mm;

FLH 25M flange heater 2.5 kW, 230 V~;

FLH 60 flange heater 6.0 kW, 400 V~;

FLHU 70 flange heater reconnectable from 2.0 kW – 2.7 kW to 4.0 kW, 400 V~.

Order reference	Art.-Nr.	Connection voltage	Heatoutput kW	flange	
FLH25M	349430	1/N/PE~230 V, 50 Hz	2.5	TK150/8	
FLHU70	338070	3/N/PE~400 V, 50 Hz	4.0		
FLH60	338060		6.0		

Accessories for hot water cylinder



SVK852

Order reference	Art.-Nr.	Short text	Features	Weight kg	
SVK852	326660	Safety valve combination	For the cold water connection of drinking water cylinders to the supply network according to DIN 1988; connection 1" external thread.	1.5	
KRRV 003	322070	thermostat for heating and domestic hot water	Capillary tube controller setting range: 0 – 70 °C switching capacity at 230 V, 50 Hz, 10 A switching temperature difference: 1.0 – 2.0 K, sheath tube length: 200 mm.	0.5	



KRRV 003

Hydro tower / combination tank

Hydro tower with external heat pump manager

Compact installation for heating and domestic hot water preparation



HWK332

The hydro tower enables the fast and simple connection of a heat pump for heating purposes to a heating system with an unmixed heating circuit. The heat pump manager included in the scope of supply of the heat pump is used for the electronic control of the components (external wiring required). The following components are installed in a space-saving way and wired ready for use:

- Switchable pipe heater (2/4/6 kW)
- Buffer tank (100 l) with installation option for an additional immersion heater (up to CTHK 634).
- Hot water cylinder (300 l) with installation option for an additional heating element (flange heater).
- Electronically regulated circulating pump (energy-efficiency class A) pre-wired with coupling relay for an unmixed heating circuit (consumer circuit).
- Unregulated circulating pump integrated for the generator circuit and hot water circulating pump.
- The hydraulic isolation of the generator circuit and the consumer circuit is done via two differential pressureless manifolds (bypass pipes), which are each fitted with a check valve.

The unregulated circulating pump in the generator circuit is only operated when the compressor is running in order to reduce the runtimes. The uniform flow through the buffer tank connected in series extends the runtimes of the compressor and ensures the required heating water flow in all operating situations.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	Weight kg	
HWK332	362360	LA 9 – 17TU, LA 11(T)AS, LA 20AS, LA 9 – 22PS LI 9 / 11 / 20TE SI(H) 5 – 11TE WI 9 / 14TE	710 x 1890x 950	210	

If the heating water connection lines are more than 10 m long, the free compression values stated in the device information must be observed (minimum pipe diameter for volume flows of more than 1.5 m³/h: DN 32)!

Combination tank for heating and DHW preparation



PWS332

Floor-mounted cylinder for optimum use of floor space, consisting of a 100 l buffer tank and a 300 l hot water cylinder. Tank and cylinder hydraulically decoupled; buffer tank with bush 1½" for immersion heaters (to CTHK 635), heating connection 1¼"; hot water cylinder usable capacity 277 l, heat exchanger area 3.2 m² smooth pipe (special inside enamelling), heating connection 1¼", hot water connection 1", circulation connection ¾", temperature sensor enclosed, installation of flange heater possible; colour aluminium white.

Order reference	Art.-Nr.	for device type	Diameter mm	Height mm	Weight kg	
PWS332	348620	up to LI 11 up to LA 12 up to SI(H) 11 up to WI 14	700	1800	185	

Radiators for the combination tank PWS 332



CTHK ...



FLH60

Order reference	Art.-Nr.	Short text	Connection voltage	Heat output kW	Weight kg	
CTHK 635	322160	TEK 635 immersion heater, 7.5 kW	3/N/PE~400 V, 50 Hz	7.5	1.9	
FLH60	338060	flange heater for domestic hot water		6.0	3.5	

All of the following immersion heaters can be used to supplement the heating: CTHK 631, 632, 633 and 634.

Combo tank for the integration of solar energy

DHW heating in flow principle



PWD750

Floor-mounted cylinder for heating and domestic hot water preparation with central flow, with three internally tin-plated heat exchangers (external pipework necessary); consisting of a buffer tank for heating and a buffer tank for DHW; heating buffer tank used as a pre-heating stage for DHW preparation. A circular plate prevents the different water layers with varying temperatures from becoming mixed together; integrated heat riser pipes distribute the energy from an additional heat generator (e.g. solar, wood boiler) to the supplementary heating system and the domestic hot water preparation according to the temperature (flange connection for integration of the RWT 750 solar heat exchanger); 125 mm PE foam insulation delivered separately; colour: white.

PWD 750 combo tank:

200 l buffer tank for heating and 550 l buffer tank for DHW; one 1½" sleeve each for immersion heaters in the heating buffer tank and the DHW buffer tank (CTHK 635 and 636); tank charging for DHW preparation up to a maximum of 2.5 m³/h and 30 kW heat output; tilting dimension 1920 mm. The VS PWD special accessory is available for the external pipework required by the PWD 750.

PWD 900 combo tank:

250 l buffer tank for heating and 650 l buffer tank for DHW; 1½" sleeves for immersion heaters (two in the heating buffer tank and one in the DHW buffer tank – CTHK 635 and 636); tank charging for DHW preparation up to a maximum of 3.0 m³/h and 40 kW heat output; tilting dimension 2205 mm.

PWD 1250 combo tank:

400 l buffer tank for heating and 850 l buffer tank for DHW; 1½" sleeves for immersion heaters (two in the heating buffer tank and one in the DHW buffer tank – CTHK 635 and 636); tank charging for DHW preparation up to a maximum of 3.5 m³/h and 60 kW heat output; tilting dimension 2,200 mm.

Observe the basic dimensions of the PWD 1250: Tank diameter 1000 mm (without insulation)!

Order reference	Art.-Nr.	for device type	Diameter with insulation mm	Width x Height x Depth mm	Weight kg	
PWD750	349100	up to heat output max. 30 kW up to water flow rate max. 2,5 m³/h	1040	790x 1730 x 790	246	
PWD900	362860	up to heat output max. 40 kW up to water flow rate max. 3,0 m³/h		790x 2050 x 790	296	
PWD1250	362890	up to heat output max. 60 kW up to water flow rate max. 3,5 m³/h	1200	1000x 1950 x 1000	407	

PWD 900 and PWD 1250: Delivery time on request!

Cannot be used for reversible heat pumps and water hardness above 14° dH! Dimensional specifications for width, height and depth refer to the cylinder without insulation.

Connection kit for PWD 750 heat exchanger



VSPWD

For easy installation of pipework for the 3 integrated hot water heat exchangers of the PWD 750. Consisting of two DN16 (1000 / 500 mm) ready-to-use flexible stainless steel corrugated pipes, 13 mm insulation thickness, ¾" cap nut and seal on both sides; maximum operating pressure 7 bar.

Order reference	Art.-Nr.	for device type	Weight kg	
VSPWD	354030	PWD	5	

Immersion heater for PWD combo tank

For the combination tank PWD 750, immersion heaters with an unheated length of 110 mm are used to support heating and DHW preparation.



CTHK ...

Order reference	Art.-Nr.	Connection voltage	Heatoutput kW	Immersion depth mm	Unheated length mm	Weight kg	
CTHK 635	322160	3/N/PE~400 V, 50 Hz	7.5	550	110	1.9	
CTHK 636	322170		9.0	650		2.1	

Reversing valve for PWD combo tank

Change-over valve for switching from heating to DHW preparation in flow and/or return flow. Motor operated for short switching times (set time open 12s, set time closed 6s); for a maximum volume flow of 2 m³/h; max. differential pressure 0.6; range of operating temperatures for heating water 5-88°C; max. ambient temperature 50°C.



DWUS25

Order reference	Art.-Nr.	Connection heating "	Nominalwidth	
DWUS25	355630	1	DN 25	

Solar heat exchanger for PWD combo tank

For connection of an external supplementary heating and domestic water system with required system separation (e.g. solar) in connection with the PWD 750 combo tank. Consisting of a flange cover with antitwist protection and 2.3 m² heat exchanger (for a solar collector area of up to approx. 15m²).



RWT 750

Order reference	Art.-Nr.	for device type	Connection heating "	Transmission capacity kW	Weight kg	
RWT 750	351640	PWD750 PWD 900 PWD 1250	¾	9	10	

Module for connecting the buffer tank and ensuring the heating water flow

Compact manifold

Combinable module with insulation jackets for installation-friendly connection of the heat pump, buffer tank, hot water cylinder and hot water distribution system. Consisting of one overflow valve, four ball valves, two integrated thermometers, one check valve, immersion sleeve for return flow sensor, safety module with pressure gauge and connection possibilities for expansion vessel. Installation option for circulating pump, inside micrometer 180 mm, DN 25 (pump not included in the scope of supply). Recommended for connection of heat pumps with a heating water flow of up to 1.3 m³/h in combination with the extension module EB KPV to 2.0 m³/h (max. volume flow 2.5 m³/h). The extension module should generally be used for systems with different volume flows in the generator and consumer circuits (i.e. radiators).

Extension module

For connecting to the KPV 25 compact distributor, enabling decoupling from the consumer circuit without differential pressure. Consisting of a corrugated stainless steel pipe with union and connecting pieces. Recommended for connection of heat pumps with a heating water flow of up to 2.0 m³/h. The consumer circuit requires a separate circulating pump due to the hydraulic isolation.

Dual differential pressureless manifold

Combinable module with insulation jackets for installation-friendly connection of the heat pump, buffer tank, hot water cylinder (using the tee joint included) and heating system. Consisting of 2 stop-cocks, 2 bypass pipes with return flow inhibitor (2000 Pa start-to-leak pressure), safety module with pressure gauge and connection option for an expansion vessel. Installation option for a circulating pump (pump not included in the scope of supply) with 1" internal thread pipe unions (DN 25) for DDV 25 and 1¼" internal thread pipe unions (DN 32) for DDV 32.

Recommended for connecting heat pumps with a heating water flow rate of up to 2.0 m³/h (DDV 25) or 2.5 m³/h (DDV 32) and external energy infeed (e.g. wood / solar) into the buffer tank connected in series (see project planning documentation). To reduce the pump operating times, the heat circulating pump can only be used with the compressor. In this case, the return flow sensor included in the scope of supply must be installed in the immersion sleeve provided, and connected. The consumer circuit requires a separate circulating pump due to the hydraulic isolation.



KPV with UP 60



EBKPV



DDV..

Order reference	Art.-Nr.	for device type	Short text	Width x Height x Depth mm	Weight kg	
KPV25	346590	up to LI 11 up to LA 11 up to SI 17 up to WI 18	compact manifold with overflow valve	250x 500 x 250	7.7	
EBKPV	348650	up to LI/LA 22 with KPV 25 up to SI 21 with KPV 25 up to WI 22 with KPV 25	EBKPV extension module	190x 180 x 180	2.4	
DDV25	358390	up to LI 20 up to LA 20 up to SI 21 / SIH 20 up to WI 22	Dual differential pressureless manifold	340x 540 x 275	11.2	
DDV32	348450	up to LI(H) 28 up to LA 28 up to SI 24 up to WI 27			12.2	

Circulating pumps for main heat pump circuit

Unregulated heat circulating pump to ensure minimum heating water flow through the heat pump, inside micrometer 180 mm. In connection with KPV 25 and EB KPV or a DDV 25, the UP 60 can be used up to LI/LA 20, SI 22 and WI 22.

The circulating pump UP 70-32 ensures the minimum heating water flow in connection with DDV 32 to LI/LA 28, SI 24 and WI 27.



UP80

Order reference	Art.-Nr.	for device type	Nominal width	Features	Weight kg	
UP60	340300	KPV25 DDV 25	DN25	Delivery height max. 3,5 m at a volume flow of 2 m ³ /h.	2.4	
UP80	340310			Delivery height max. 4 m at a volume flow of 5 m ³ /h.	4.5	
UP60-32	355970	DDV32	DN32	Delivery height max. 3,5 m at a volume flow of 2 m ³ /h.	2.6	
UP70-32	354020			Delivery height max. 4 m at a volume flow of 5 m ³ /h.	5.0	

Pump dimensioning must be checked according to the pressure drop and volume flow!

Electronic circulating pump for consumer circuit



UPE60

Electronically controlled circulating pump UPE 60

Electronically-controlled heat circulating pump with integrated flexible capacity via freely-adjustable rotational speed, micrometer 180 mm, low energy consumption thanks to energy efficiency class A (fulfils the requirements of EnEV, §14 (3)), automatic lowering of temperature at night, type of regulation (controlled or constant rotational speed) and the control curve can be set automatically via Softtouch, including pump plug for easy installation of the electrical connection cable.

Electronically controlled circulating pumps UPE 70, UPE 80, UPE 120

High-efficiency wet running pump with integrated electronic power regulation. Types of regulation selectable via operating button for optimum load adjustment (differential pressure regulation constant (Δp -c) or variable (Δp -v) and speed adjustment via control input). Low energy consumption thanks to energy efficiency class A (complies with the requirements of the EnEV, §14 (3)), inside micrometer 180 mm, including mains and control cable (length 1.5 m). Relay for decoupling the control and load circuits, including relay base and retaining clip in the scope of supply.

Order reference	Art.-Nr.	Nominalwidth	Features	Weight kg	
UPE60	358870	25	Maximum delivery height 3.2 m at a volume flow of 2 m ³ /h	2.3	
UPE70-25	362790		Maximum delivery height 5.9 m at a volume flow of 2 m ³ /h	2.8	
UPE70-32	362800	32		3.0	
UPE80-25	362810	25	Maximum delivery height 5.2 m at a volume flow of 5 m ³ /h	4.2	
UPE80-32	362820				
UPE120-32	362830	32	Maximum delivery height 8.5 m at a volume flow of 7 m ³ /h	6.5	

The use of an electronically-regulated circulating pump in the consumer circuit requires a manifold without differential pressure. An unregulated circulating pump must be used in the main heat pump circuit in order to ensure the minimum heating water flow rate.

Pump dimensioning must be checked according to the pressure drop and volume flow!

Heating distribution system modules

Unmixed heating circuit module

Combinable module with insulation jackets for connecting an unmixed heating circuit or DHW or swimming pool water preparation. Can be used for a heating water flow rate of up to 2.5 m³/h. Consisting of two ball valves with check valve, two integrated thermometers, pump ball valve, insulation jackets, installation option for circulating pump, inside micrometer 180 mm, DN 25 (pump not included in the scope of supply).

Mixed heating circuit module

Combinable module with insulation jackets for connecting a mixed heating circuit. Can be used for a heating water flow rate of up to 2 m³/h. Consisting of two ball valves with check valve, two thermometers, 3-way mixer with actuator and 140 sec. runtime, connection voltage ~230 V, degree of protection IP40, strap-on sensor and insulation jackets, installation option for regulated circulating pump, inside micrometer 180 mm, DN 25, which is to be constructed after pressure loss of the heating system (pump not included in the scope of supply).

Manifold bar

Combinable module with insulation jackets for simultaneous connection of several heating distribution system modules, with two 1½" (external/internal thread) connecting pairs each to the top and bottom, universally combinable with KPV 25, MMH 25 and WWM 25, complete with union and connecting pieces (flat sealing).

Order reference	Art.-Nr.	Short text	Width x Height x Depth mm	Weight kg	
WWM 25	346600	Hot water module / unmixed heating circuit module	245x 420 x 240	3.9	
MMH25	348640	Mixed heating circuit module with temperature sensor	250x 420 x 250	5.0	
VTB 25	339870	Manifold bar	500x 180 x 135	7.1	

If the hot water distribution system is used for heating and cooling, the water-bearing pipes must have a low-temperature insulation within the insulation jackets. With reversible heat pumps with additional heat exchanger no manifold bar is necessary for the connection of the DHW preparation!



WWM 25 with UP ..



MMH 25 with UP ..



VTB 25

Domestic hot water preparation distribution system modules

Hot water module

Combinable module with insulation jackets for connecting DHW or swimming pool water preparation. Can be used for a heating water flow rate of up to 2.5 m³/h. Consisting of two ball valves with check valve, two integrated thermometers, pump ball valve, insulation jackets, installation option for circulating pump, inside micrometer 180 mm, DN 25, which is to be constructed after pressure loss of the heating system (not included in the scope of supply).

Manifold bar

Combinable module with insulation jackets for connecting to a KPV 25 compact manifold and WWM 25 hot water module. Each with two connecting pairs 1 1/2" (external thread/internal thread) upwards and downwards, useable for a hot water flow of up to max. 2.5 m³/h (flat sealing).

Order reference	Art.-Nr.	Short text	Width x Height x Depth mm	Weight kg	
WWM 25	346600	Hot water module / unmixed heating circuit module	245x 420 x 240	3.9	
VTB 25	339870	Manifold bar	500x 180 x 135	7.1	



WWM 25 with UP ..



VTB 25

Hot water pump unit

Pump unit for direct mounting of the hot water circulating pump on the rear of the hot water cylinder (pump not included in the scope of supply). Consisting of: Elbow union with manual bleeders, installation option for DN 25 circulating pump with two ball valves and gravity control. Extra WPG 32: 1 1/4" elbow union with drainage for hot water return.

Order reference	Art.-Nr.	for device type	Connection heating "	Weight kg	
WPG25	356030	UB0 UP 80	1 1/4	1.9	
WPG32	356040	UB0-32 UP 70-32	1 1/2	4.4	



WPG32

Circulating pumps for DHW preparation

Unregulated circulating pump, applicable for the hot water load circuit, inner micrometer 180 mm.

Order reference	Art.-Nr.	Nominalwidth	Features	Weight kg	
UP60	340300	DN25	Delivery height max. 3,5 m at a volume flow of 2 m ³ /h.	2.4	
UP60-32	355970	DN32		2.6	
UP80	340310	DN 25	Delivery height max. 4 m at a volume flow of 5 m ³ /h.	4.5	

The reachable hot water temperatures are dependent on the maximum heat output of the heat pump, the heat exchanger area and the volume flow in the load circuit (the respective design for a maximum hot water temperature of 45 °C according to the project planning documentation). For heat pumps with two performance levels, the DHW preparation can be done using a compressor.



UP80

Mixer module for bivalent systems

Combinable mixer module for connecting a second heat generator (e.g. oil boiler) or a renewable heat generator with heat accumulator. Can be used for a heating water flow rate of up to 2 m³/h. Consisting of a 4-way mixer with actuator and 140 sec. runtime, connection voltage ~230 V, degree of protection IP40.

Order reference	Art.-Nr.	Width x Height x Depth mm	Weight kg	
MMB25	348880	190x 365 x 160	5.3	



MMB25

Solar station for hot water

Solar back-up for domestic hot water preparation



SST25

Heat exchanger solar station consisting of solar separation system and pump assembly with insulation jackets for integrating solar installations up to 10 m² into the DHW heating system. The solar station enables efficient hot water heating via the heat pump as well as via the solar installation. Modules with primary and secondary cycle consisting of: 2 circulating pumps (WILO- STAR-ST 25/6 and STAR-RS 24/4); 4 ball valves 1" with thermometer, return flow inhibitor, safety assembly with safety valve and 0-10 bar pressure gauge, connection options for expansion vessel (solar controller not included in scope of supply).

Order reference	Art.-Nr.	Width x Height x Depth mm	Weight kg
SST25	348430	320x 1050 x 320	19

Dirt traps



SMF..

Dirt trap for installation into the heating circuit, suitable for all non-corrosive substances up to 150°C. To protect the heat pump against damage caused by impurities and thus extend its service life. Mesh size 0.6 mm.

Order reference	Art.-Nr.	for device type	Connection heating "	Weight kg
SMF25	362130	LA 8 – LA 16AS(R)/PS LI(K) 8 – 9TE(L)	1	1.0
SMF32	362140	LA 7 – 28PS/AS/HS LI 11 – 28TE(R+) SI(K/H) 5 – 21 WI 9 – 27	1¼	1.2
SMF40	362150	LA 40AS SI(H) 40 – 50TE WI 50TU	1½	1.5
SMF50	362160	SI 5 – 100TE(R+) WI 100TU	2	2.3
SMF65	362170	SI 30TE	2½	3.7

Expansion joints



KOMP ..

Double-sphere rubber expansion joint for isolating heat pumps and heating systems. Absorbs oscillations and movements caused by pumps, compressors, fittings and other sources, reduces noise output and evens out internal strain (axial and lateral deviations) stemming from imprecisions in assembly. EPDM bellows, galvanised C-steel internal thread connections, service temperature -10°C to 110°C.

Order reference	Art.-Nr.	for device type	Connection heating "	Weight kg
KOMP 25	362050	LA 8 – 16AS(R)/PS LI(K) 8 – 9TE(L)	1	2.0
KOMP 32	362060	LA 17 – 28PS/AS/HS, LA 9 – 17TU LI 11 – 28TE(R+) SI(K/H) 5 – 21 WI 9 – 27	1¼	2.8
KOMP 40	362070	LA 40AS SI(H) 40 – 50TE WI 50TU	1½	4.9
KOMP 50	362080	SI 5 – 100TE(R+) WI 100TU	2	6.3

The installation of double-sphere rubber expansion joints between the heat pump and the heating system is strongly recommended for solid-borne sound insulation purposes. The following heat pumps are equipped with integrated solid-borne sound insulation: LA 9 – 60TU, LIKI 14TE, SI 22TU, SIK(H) compact brine-to-water heat pumps, brine-to-water and water-to-water heat pumps with two performance levels. The installation of an additional expansion joint is also recommended for these heat pumps, in order to optimise solid-borne sound insulation.

Connection set



VSE32-...

Flexible DN 32 stainless steel Wellflex pipe available in different lengths with 1½" cap nut, seals and 1½" external thread – 1¼" external thread transitional screw connection for quick and easy connection of heat pump, hot water cylinder and buffer tank to the heat distribution system.

Order reference	Art.-Nr.	Connection heating "	Features	Weight kg
VSE32-50	362520	1½	DN 32, length 500 mm	0.9
VSE32-100	362530		DN 32, length 1000 mm	1.2
VSE32-150	362540		DN 32, length 1500 mm	2.6
VSE32-200	362550		DN 32, length 2000 mm	2.7
VSE32-300	362560		DN 32, length 3000 mm	3.4

Heating controller – heat pump manager



WPM 2006 plus



WRM EconPlus

Controller for the heat pump heating system for installation in frost-free rooms, with large back-lit LC display, time-controlled lowering and raising of the heating characteristic curves, time functions for DHW preparation according to need using the heat pump, with optional targeted reheating via flange heater. „Bivalent-renewable“ operating mode for combining the heat pump with additional renewable energy sources such as wood or solar energy; dynamic input menus with different levels for technicians and users. Two independent mixer outputs for controlling an additional heat generator and a maximum of two mixed heating circuits. Automatic program for targeted heat drying of screed floors. PC, modem and bus connection via plug-in modules (special accessories); external sensor (standard NTC-2) included in the scope of supply.

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	Weight kg	
WPM 2006 plus	352550	Delivered as a wall mounted controller in the scope of supply of the air-to-water heat pump for outdoor installation.	370x 330 x 90	4.1	
WRM EconPlus	355950	Delivered as a wall mounted controller in the scope of supply of the air-to-water heat pump for outdoor installation. Integrated thermal energy meter with separate evaluation for heating and domestic hot water preparation. Simplified electrical connection with separate terminal blocks for 24 V and 230 V.	303x 489 x 120	5.0	

Heat pump manager extension module



NWPM



EWPM

The NWPM extension module acts as an interface between the heat pump manager and an Ethernet network. This extension allows the remote setting and remote monitoring of the heat pump. A PC with a network card or a home network is required for this. The module can record and save data. This extension is independent of the operating system. A data exchange with a KNX/EIB bus system, and thus the connection of the heat pump manager to a building management technology system is provided via the EWPM extension module. This extension makes it possible to set and monitor the heat pump via an installation bus.

Order reference	Art.-Nr.	for device type	Features	
NWPM	356960	WPM 2004 / 2006 / 2007 WPM EconPlus	Heat pump manager extension module for connection to an Ethernet network.	
EWPM	356970	WRM 2006 / 2007 WPM EconPlus	Heat pump manager extension module for connection to the KNX/EIB bus.	
WPM 410	339410		Extension module (RS485) for the heat pump manager for data transfer via Modbus interface protocol.	

Extension modules can be used from software version H_H50 onwards!

Thermal energy meter for connection to the heat pump manager



WMZ..

Thermal energy meter, consisting of a hydraulic assembly for flow and return flow (heating circuit) and electronic flow rate and temperature detection. Low pressure loss thanks to flow measurement via Kármán vortex street in the flow and integrated temperature sensor in the return flow (immersion sleeve). Electronics module for connection to the heat pump manager with separate evaluation for preparation of heating water, domestic hot water (exception: compact heat pumps) and swimming pool water. Transitional screw connections for direct connection of the WMZ 25 to the KPV 25 / DDV 25 or of the WMZ 32 to the DDV 32 included in the scope of supply.

Order reference	Art.-Nr.	Nominalwidth	Features	Weight kg	
WMZ25	358220	25	for volume flows of 0.5 – 2.5 m³/h	2.1	
WMZ32	358810	32	for volume flows of 1.0 – 5.0 m³/h	3.0	

To evaluate the measured data, the heat pump manager requires software version H_6x (software update required). High-efficiency air-to-water heat pumps have thermal energy metering already integrated. Note: The thermal energy meter complies with the quality requirements of the BAFA (= German Federal Office of Economics and Export Control) market incentive programme subsidizing efficient heat pumps. The thermal energy meter is not subject to obligatory calibration, and can thus not be used for the heating cost billing procedure!

General accessories for the heat pump manager



AP PGD



FG3115



RBGWPM

Order reference	Art.-Nr.	Short text	Features
APPGD	356570	Remote control for WPM 2006/2007/EconPlus/R	For connection to the wall-mounted WPM 2006 heat pump manager with integrated display or as an additional remote control for WPM 2007/EconPlus/R. The remote control has an LC-Display with identical menu navigation and backlighting. The AWP 900 connecting line must be ordered separately.
AWPM 900	340210	Connection line for AP PGD	Heat pump manager / remote control connecting line, 6-core cable. Can also be used as a connecting line for the removable control panel of the WPM 2007. (Length 15 m)
FG3115	336620	Room temperature sensor with casing	Norm NTC-2 temperature sensor (2.43 kΩ/20°C) according to DIN 44574 with weather proof casing for surface mounting, terminal connection.
RBGWPM	339700	Swimming pool / remote fault indicator relay module	For connecting the swimming pool circulating pump (M19) and the output of a 230 V signal if a system fault occurs (not required for heating and cooling systems).

Special accessories for the heat pump manager WPM 2006



WPM 2006



PA 550



BVL ...

Order reference	Art.-Nr.	Short text	Features
NormNTC-2	353400	Room temperature sensor	For connection to the wall-mounted WPM 2006 heat pump manager with integrated display. Can be used as a strap-on sensor for mixed heating circuits, as a flow or cylinder sensor for the bivalent-renewable operating mode, as a hot water and room temperature sensor (for installation in on-site wall casing), standard NTC-2 sensor according to DIN 44574, diameter of 6 mm, connection cable 6 m.
PA 550	338550	Strap-on sensor	Temperature sensor for the heating circuit or hot water cylinder with 6 m connection cable, diameter 9.7 mm. Connection to the heat pump manager (standard NTC sensor according to DIN 44574).
BVL 996-1	321990	10 control line	Coded connecting line between the heat pump manager (heating controller) and an air-to-water heat pump installed outdoors. Wired ready for use with non-confusable plug connections (ductwork at least 70 mm).
BVL 997-1	322000	20 control line	
BVL 998-1	322010	30 control line	
BVL 999-1	359120	40 control line	

Special accessories for the heat pump manager WPM 2007



MSPGD

Order reference	Art.-Nr.	Short text	Features
NTC-10	353390	Room temperature sensor NTC-10	For connection to the WPM 2007 heat pump manager with removable control panel. Can be used as a strap-on sensor for mixed heating circuits, as a flow or cylinder sensor for the bivalent-renewable operating mode, as a hot water and room temperature sensor (for installation in on-site wall casing), diameter of 6 mm, connection cable 6 m.
MSPGD	353810	Wall mounting set MS PGD	For using the WPM 2007's removable control panel as a remote control or for installation at an optimum operating height. Consists of plastic frames for wall mounting, incl. fixing material, 6 m connecting cable and brown red plastic covers for the design screen.

Fan convectors heating

SmartRad

Smart Rad fan convector with integrated electronic thermostat for mounting on the wall. Manual and automatic operation, maximum fan level can be preset; automatic regulation of fan level according to heat requirement. Water connection can be on the left or right. Heating and lowering times as well as frost protection can be individually adjusted using various RX programming cassettes which can be connected to the device.



SRX...M

Order reference	Art.-Nr.	Rated power (35°C flow / 30 °C return temperature) W	Rated power (45°C flow / 40 °C return temperature) W	Rated power (55°C flow / 47 °C return temperature) W	Airvolume flow m³/h	Width x Height x Depth mm	Weight kg	
SRX 080 m	359080	358	695	956	125	503x 530 x 145	13.5	
SRX120M	359090	561	1119	1541	190	670x 530 x 145	17.0	
SRX140M	359100	631	1329	1828	225	740x 530 x 145	18.0	
SRX 180 m	359110	893	1760	2424	300	911x 530 x 145	22.0	

Programming cassette EPX, GFP, SRX convectors



RX PW 1

RXTI RB

Order reference	Art.-Nr.	Features	
RXTI 24	RXTI24	24h programming cassette with LC display, connectable to EPX wall convectors. Four IN and OUT times freely programmable, lit display, key lock. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.	
RX PW 1	RXPW1	Weekly programming cassette with LC display, connectable to EPX wall convectors, up to four programs can be set for a weekend block (Sat-Sun) or a workday block (Mon-Fri), the IN and OUT switch times are set, with lit display and key lock. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.	
RXTI RB	RXTIRB	Limited specified heating periods; programming cassette for setting a heating period from 0.5 – 4.0 hours, adjustable in 0.5 hour steps, when the specified heating period ends, the device shuts off or turns to antifreeze mode. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.	

Fan convectors heating/cooling

Fan convectors heating/cooling with integrated electronic thermostat

Casing colour white
Connection voltage 1/N/PE ~230 V, 50 Hz

Exclusive rounded design; compact dimensions; especially suited for wall mounting; ceiling suspension possible; floor mounting using special accessories (ZH1). Water connections can be reversed during installation (½" internal thread connections); adjustable ventilation grid; the fan convector switches off automatically when the ventilation grid closes; electronic temperature control; automatic speed change on the ventilator; automatic operating mode switch-over and automatic switch-on/switch-off depending on the flow temperature; minimum flow temperature of 35 °C for heating operation, maximum of 17 °C for cooling operation; constant-volume water flow; ventilation unit with radial fan and 3 speed levels; especially low-noise operation; with electronically regulated fan as standard.



HL ..C

Order reference	Art.-Nr.	Heating output 35/30 °C W	Heating output 50/45 °C W	Cooling capacity 7/12 °C W	Water flow l/h	Pressure drop Pa	Width x Height x Depth mm	Weight kg	
HL11C	351730	510	880	650	111	1170	640x 507 x 187	13.6	
HL16C	351740	760	1300	950	163	2420	750x 512 x 189	14.6	
HL26C	351750	1410	2390	1790	307	8555	980x 522 x 191	17.6	
HL36C	351760	1780	3020	2330	399	6470	1200x 526 x 198	20.6	

By replacing the radiators present in existing buildings with fan convectors, the system temperatures can be lowered thereby increasing the annual performance factor of the heat pump heating system.

Device base for floor mounting

Supporting feet for direct floor mounting of the fan convector with the option of feeding through the connecting pipes (base height: 93 mm); colour white (packaging unit 2).



ZH

Order reference	Art.-Nr.	for device type	Weight kg	
ZH1	351850	HL11-36C/SK	0.9	

Air-to-water heat pump

Max. flow temperature for heating 65 °C

for utilisation of waste heat



LI2M

A heat pump module for utilisation of waste heat; integrated radial fan, exhaust and outgoing air stubs for optional connection of a duct system DN 160 (maximum length 10m), infinitely variable return set temperature. The transfer of the generated heat output is done via an integrated stainless steel heat exchanger (external circulating pump required). Heat output approx. 2 kW at an exhaust air temperature of 25°C and a heating water outlet temperature of 35°C.

Lower operating limit heat source (heating operation) 0 °C Upper operating limit heat source (heating operation) 40°C;

Refrigerant R134aConnection heating ½

Order reference	Art.-Nr.	Short text	Width x Height x Depth mm	Weight kg
LI2M	356330	Heatpump module	450x 725 x 550	54

Hot water heat pumps – heat source indoor air / cellar air

Hot water heat pump with foil cladding

Hot-water temp. up to max. 60 °C

with air duct connection

Lower operating limit heat source (heating operation) 8 °C
Upper operating limit heat source (heating operation) 35 °C



BWP 30H / BWP 30HLW

Insulated foil cladding, radial fan, exhaust air stub and outgoing air stub for optional connection of a duct system with a maximum length of 10 m, infinitely adjustable hot water temperature for total volume of 300 l, switches for heat pump and heating element, steel cylinder enamelled acc. to DIN 4753, protection anode against corrosion, medium heat pump output 1870 W, hot water temperature selectable during heat pump operation (23° to 60 °C), heating up to 65 °C with standard heating element (1.5 kW) possible, can be either manually controlled or, e. g. , via an external timer, refrigerant designation R134A, colour white (similar to RAL 9003).

Order reference	Art.-Nr.	Connection voltage	ØP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg
BWP30H	351960	1/N/PE~230 V, 50 Hz	3.5	660x 1695 x 660	110

Nipple size DN 160, connection with SF R 162510 air hose or MFE 16 bush

The maximum hot water temperature reachable and the lower operating limit vary by ±2K due to component tolerances! In order to prevent an air short circuit, a room height of approx. 2.5 m is necessary for free blowing-out mounting. The minimum height of the installation room is reduced to approx. 2m by using a pipe bend on the air outlet side or by using a connection to an air duct system.

Hot water heat pump with foil cladding

Hot-water temp. up to max. 60 °C

Air duct connection and additional heat exchanger

Lower operating limit heat source (heating operation) 8 °C
Upper operating limit heat source (heating operation) 35 °C



BWP 30H / BWP 30HLW

Insulated foil cladding, radial fan, exhaust air stub and outgoing air stub for optional connection of a duct system with a maximum length of 10 m, infinitely adjustable hot water temperature for usable capacity of 290 l, switches for heat pump, heating element and second heat generator, steel cylinder enamelled acc. to DIN 4753, protection anode against corrosion, medium heat pump output 1870 W, hot water temperature selectable during heat pump operation (23° to 60 °C), heating up to 65 °C with standard heating element (1.5 kW) possible, can be either manually controlled or, e. g. , via an external timer, integrated additional heat exchanger (approx. 1.45 m²) for connecting an external heat generator (e. g. , boiler or solar installation), cladding tube for external cylinder sensor, connection option for an external block of heat pump operation, relay output for controlling an external loading pump, refrigerant designation R 134a, colour white (similar to RAL 9003).

Order reference	Art.-Nr.	Connection voltage	ØP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg
BWP30HLW	351380	1/N/PE~230 V, 50 Hz	3.5	660x 1695 x 660	125

Nipple size DN 160, connection with SF R 162510 air hose or MFE 16 bush

The maximum hot water temperature reachable and the lower operating limit vary by ±2K due to component tolerances! In order to prevent an air short circuit, a room height of approx. 2.5 m is necessary for free blowing-out mounting. The minimum height of the installation room is reduced to approx. 2m by using a pipe bend on the air outlet side or by using a connection to an air duct system.

Hot water heat pump with sheet-steel casing

Hot-water temp. up to max. 60 °C

Air duct connection and additional heat exchanger

Lower operating limit heat source (heating operation) 8 °C
Upper operating limit heat source (heating operation) 35 °C



AWP 30HLW

High-grade painted sheet steel casing, radial fan, exhaust air stub and outgoing air stub for optional connection of a duct system with a maximum length of 10 m, infinitely adjustable hot water temperature for total volume of 290 l, switches for heat pump, heating element and second heat generator, steel cylinder enamelled acc. to DIN 4753, protection anode against corrosion, medium heat pump output 1870 W, hot water temperature selectable during heat pump operation (23° to 60 °C), heating up to 65 °C with standard heating element (1.5 kW) possible, can be either manually controlled or, e. g. , via an external timer, integrated additional heat exchanger (approx. 1.45 m²) for connecting an external heat generator (e. g. , boiler or solar installation), cladding tube for external cylinder sensor, connection option for an external block of heat pump operation, relay output for controlling an external loading pump, refrigerant designation R 134a, colour white (similar to RAL 9003).

Order reference	Art.-Nr.	Connection voltage	COP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg	
AWP 30HLW	351390	1/N/PE~230 V, 50 Hz	3.5	660x 1700 x 700	175	

Nipple size DN 160, connection with SF R 162510 air hose or MFE 16 bush

The maximum hot water temperature reachable and the lower operating limit vary by +/- 2K due to component tolerances! In order to prevent an air short circuit, a room height of approx. 2.5 m is necessary for free blowing-out mounting. The minimum height of the installation room is reduced to approx. 2m by using a pipe bend on the air outlet side or by using a connection to an air duct system.

Special accessories for hot water heat pumps



BGN...

Order reference	Art.-Nr.	Short text	Features	Weight kg	
SVK852	326660	Safety valve combination	For the cold water connection of drinking water cylinders to the supply network according to DIN 1988; connection 1" external thread.	1.5	
SF R 162510	359620	flex pipe	Flexible round aluminium ventilation tube, 4 layers, with 25 mm thermal insulation and vapour block	6.1	
SF SD 165015	360780	sound damper	Flexible sound damper, 4 layers, with thermal insulation and vapour block	0.7	
BGN16-90	341340	Bend (60mm, 90°)	Bend, pressed, smooth sheet steel, acc. to DIN 24145, lip seal.	1.0	
MFE16	341320	Sleeve DN 160	Installation between moulded parts DN 160, smooth sheet steel, acc. to DIN 24145.	0.2	

Hot water heat pumps – heat source indoor air / exhaust air

Hot water heat pump with foil cladding

Hot-water temp. up to max. 60 °C

for utilisation of indoor air

Lower operating limit heat source (heating operation) 15 °C
Upper operating limit heat source (heating operation) 35 °C



BWP20A

Hot water heat pumps for using 20 °C indoor air for domestic hot water preparation, installation dimension 60 cm; Insulated foil cladding, radial fan, exhaust air stub and outgoing air stub for optional connection of a duct system with a maximum length of 10 m, infinitely adjustable hot water temperature for total volume of 200 l, switch for permanent fan operation, steel cylinder enamelled according to DIN 4753, protection anode against corrosion, medium heat pump output 910 W, hot water temperature selectable during heat pump operation (23° to 60 °C), heating up to 65 °C possible with standard heating element (1.5 kW), can be controlled either manually or, for example, via an external timer, refrigerant designation R134a, colour white (similar to RAL 9003).

Order reference	Art.-Nr.	Connection voltage	COP according to EN 255 for heating up from 15 °C to 45 °C	Width x Height x Depth mm	Weight kg	
BWP20A	358230	1/N/PE~230 V, 50 Hz	3.26	550x 1700 x 550	96	

DN 125 outgoing air stubs for optional connection to an exhaust air system.

The maximum hot water temperature reachable and the lower operating limit vary by +/- 2K due to component tolerances!

Accessories for DN 125 hot water heat pumps



SFR

Order reference	Art.-Nr.	Short text	Features	Weight kg	
SF R 122510	359610	flex pipe	Flexible round aluminium ventilation tube, 4 layers, with 25 mm thermal insulation and vapour block	4.4	

Swimming pool dehumidifier

Degree of protection IP 34

Lower operating limit heat source (heating operation) 15 °C

Upper operating limit heat source (heating operation) 38 °C



SE...T

Cabinet unit for dehumidifying rooms with swimming pools in recirculating air operation with active heat recovery using the heat pump. The integrated control can be used to control the humidity and, depending on the scope of supply, the temperature. Operating modes and settings are shown on and entered via the integrated display. Installation inside the room housing the swimming pool without duct connection. Air intake and air outlet directly at the installation location, no ducts required for air circulation. Air intake via perforated metal plate grid, air outlet with rotating, chromed air grids for targeted air circulation on the device top. Front panel made of saltwater-proof anodised aluminium; side and back panel made of blue plastic (similar to RAL 5002). Sound and vibration-isolated compressor decoupled from the casing; with heat exchangers with corrosion-resistant coating; automatic defrosting as standard.

Order reference	Art.-Nr.	Dehumidification output kg/h	Air volume flow m³/h	Maximum pool surface area m²	Connection voltage	Width x Height x Depth mm	Weight kg	
SE30T	362480	2.0	700	30	1/N/PE~230 V, 50 Hz	1200x 880 x 350	59	
SE40T	362490	3.0		40			77	
SE50T	362500	4.0	900	50	3/N/PE~400 V, 50 Hz		80	
SE60T	362510	5.2		60			83	

The maximum pool surface area is designed for periodically used swimming pools without an overflow gutter, with a swimming pool cover and a maximum of 2 hours' pool usage per day.

Accessories for swimming pool dehumidifiers

Order reference	Art.-Nr.	Features	
WKSSE	357080	Bracket set for off-ground wall mounting.	
PWW HRG	356920	Heat exchanger for subsequent air heating, including control valve and flexible connecting hoses to prevent solid-borne sound transmission. The shutoff valves and dirt traps must be installed by the customer (heat output with indoor air 29 °C / flow temperature 40 °C: 1.4 kW (SE 30T/SE 40T); 1.6 kW (SE 50T/SE 60T)).	

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Solar collector



SOLC 180



SOLC 220

High-performance flat plate collector for mounting onto roofs and flat roofs or for free-standing installation, laser-welded full surface absorber with highly-selective coating. Collector for universal use can be used for larger surface areas as well as for single mounting. The connections make fast and hydraulically safe mounting possible. System is operated with pre-mixed SOLHT 20 solar fluid, providing the required frost protection. The collector casing consists of anthracite-coloured, powder-coated aluminium. The structured solar safety glass reliably protects the absorber.

Nominal flow 50–120 l/min Gross surface 2.18 m²

Order reference	Art.-Nr.	Aperture surface m ²	Efficiency level %	Features	Width x Height x Depth mm	Weight kg	
SOLC 180	360510	1,97	77.6	Flat plate collector with single meander, max. 3 collectors can be hydraulically connected in series, 2 x 12 mm connections on top (clamping ring fittings), stagnation temperature 191 °C, nominal volume 1.73 l	1158x 1878 x 75	40	
SOLC 220	360520	2,01	78.1	Flat plate collector with meander pipe and two collection manifolds, max. 10 collectors can be hydraulically connected in series, 4 x 22 mm connections on the side (plug-in system with double O-ring seal), stagnation temperature 202 °C, nominal volume 1.7 l	1158x 1178 x 95		

Solar station

Thermally insulated two-pipe solar station, pre-mounted, serves as connecting element between the collector field and the hot water cylinder. Dial thermometer in flow and return, 6 bar safety valve, permanent breather for continuous air extraction during operation, integrated purging and filling unit, suitable for wall mounting.

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	Weight kg	
SOLPU1	356230	Suitable for a collector surface of up to 12 m ² , flow rate volume meter 1-20 l/min, 0-6 bar high-temperature proof pressure gauge, axis clearance 90 mm, 3/4" flat-sealing connections	280x 560 x 200	7.8	
SOLPUV	360540	Suitable for a collector surface of up to 22 m ² , electrical valve block (3 Watt) serves as gravity control, flow rate volume meter 6.9 – 25.8 l/min (propylene glycol) and 8 – 30 l/min (water), 0 – 10 bar high-temperature proof pressure gauge, axis clearance above 45 mm, below 100 mm, 1" internal thread connections	320x 560 x 150	7.5	



SOLPU1



SOLPUV

Mounting accessories for SOLC 180 solar collectors

Mounting set for roof mounting (pantiled roof, plain tile, corrugated sheet) and free-standing installation of SOLC 180 solar collectors. Consisting of the basic set for the first collector and an extension set for each additional collector. The sets include profile rails and stop anchors for collector mounting onto the respective type of roof as well as components for the hydraulic integration.

Order reference	Art.-Nr.	Roofmounting system	Features	Weight kg	
SOLC 180 PAG	360550	Frankfurt tile	Basic set for mounting a collector vertically or horizontally on a roof.	10	
SOLC 180 PAE	360560		Extension set for mounting any further collectors vertically or horizontally on a roof.	7	
SOLC 180 BAG	360570	Plaintile	Basic set for mounting a collector vertically or horizontally on a roof.	10	
SOLC 180 BAE	360580		Extension set for mounting any further collectors vertically or horizontally on a roof.	7	
SOLC 180 WAG	360590	Corrugated sheet	Basic set for mounting a collector vertically or horizontally on a roof.	9	
SOLC 180 WAE	360600		Extension set for mounting any further collectors vertically or horizontally on a roof.	6	
SOLC 180 FAG	360610	Ground mounting kit	Basic set for horizontal free-standing installation of a collector.	7	
SOLC 180 FAE	360620		Extension set for horizontal free-standing installation of any further collectors.	5	



SOLC 180 PAG

Mounting accessories for SOLC 220 solar collectors



SOLC 220 PAG

Mounting set for roof mounting (pantiled roof, plain tile, corrugated sheet) and free-standing installation of SOLC 220 solar collectors. Consisting of the basic set for the first collector and an extension set for each additional collector. The sets include profile rails and stop anchors for collector mounting onto the respective type of roof as well as components for the hydraulic integration.

Order reference	Art.-Nr.	Roofmounting system	Features	Weight kg	
SOLC 220 PAG	360630	Frankfurt tile	Basic set for mounting a collector vertically or horizontally on a roof.	10	
SOLC 220 PAE	360640		Extension set for mounting any further collectors vertically or horizontally on a roof.	7	
SOLC 220 BAG	360650	Plaintile	Basic set for mounting a collector vertically or horizontally on a roof.	10	
SOLC 220 BAE	360660		Extension set for mounting any further collectors vertically or horizontally on a roof.	7	
SOLC 220 WAG	360670	Corrugated sheet	Basic set for mounting a collector vertically or horizontally on a roof.	9	
SOLC 220 WAE	360680		Extension set for mounting any further collectors vertically or horizontally on a roof.	6	
SOLC 220 FAG	360690	Ground mounting kit	Basic set for horizontal free-standing installation of a collector.	7	
SOLC 220 FAE	360700		Extension set for horizontal free-standing installation of any further collectors.	5	

Solar controller



SOLCU 1

For regulating or controlling thermal solar energy systems. Equipped with speed control, operating hours counter, maximum cylinder temperature, collector emergency cut-off, animated graphic LCD with backlighting. Delivery includes the PT 1000 temperature sensors.

Order reference	Art.-Nr.	Short text	Features	Width x Height x Depth mm	
SOLCU 1	356220	Solar controller for one collector field and one cylinder	Inputs: T1 – T3: Temperature detection (PT 1000); 1 output: Triac output for speed control of the solar pump (max. switching capacity 250 W [~ 230 V]).	137x 134 x 38	
SOLCU 2	356560	Solar controller with 14 different pre-programmed system configurations	Inputs: T1 – T4: Temperature detection (PT1000), T5: Temperature detection (PT1000) or pulse detection; 2 outputs: R1: Triac output for speed control (switching capacity max. 250 W [~ 230 V]), R2: Relay switching output (switching capacity max. 800 W [~ 230 V])	170x 170 x 46	

Solar accessories

Order reference	Art.-Nr.	Short text	Features	
SOLFH15	356320	Connection set	Pre-insulated pipe system for connecting a solar collector to the hot water cylinder and the solar station. The system consists of two pre-insulated stainless steel corrugated tubes DN 16 each 15 m long with integrated sensor leads	
SOLAS1	356290	De-aerator	De-aerator and quick-vent valve for installation in closed solar energy systems	
SOLHT20	356260	Heat carrier fluid	Ready-to-use heat carrier fluid (20 l) for solar energy systems, propylene glycol-based, with corrosion protection and antifreeze capacity down to -28 °C.	
SOLHTTK	356270	Test set	Test set for solar fluid, consisting of a refractometer for testing antifreeze and pH indicator rods for testing corrosion protection.	

Solar expansion vessels



SOLV ..



SOLV/K 1

Order reference	Art.-Nr.	Nominal volume l	Features	
SOLV 12	356240	12	Diaphragm expansion vessel for solar energy systems, short-time temperature resistance up to 100 °C	
SOLV 18	356250	18		
SOLV 24	356980	24		
SOLV 35	356990	35		
SOLV 50	357000	50		
SOLV 80	361970	80		
SOLV/K 1	356280		Connection set (3/4") for expansion vessel, stainless steel corrugated tube (3/4"), internal thread – internal thread x 500 mm, wall bracket with mounting material, for maximum vessel diameter 440 mm	



WWSP 432 SOL

Solar hot water cylinders for heat pumps

Solar domestic hot water cylinder made of steel (special enamelling inside) with protection anode, two internal bare-tube heat exchangers for solar and heating, thermometer, polyurethane insulation for minimal stand-by losses, colour white, TK150/DN110 flange. Permissible operating pressure 10 bar;

Order reference	Art.-Nr.	for device type	Features	Diameter x Height mm	Weight kg	
WWSP 432 SOL	361080	up to LI 20 excluding LI 16 up to LA 22 excluding LA 16 / LA 22HS up to SI 11 up to WI 14	400 l nominal volume, 346 l usable capacity, 3.2 m ² heat exchanger area (heating), 1.3 m ² heat exchanger area (solar), 2.9 kWh/24h stand-by loss, 1 1/4" solar and heating connections, 1" hot water connection, 3/4" circulation connection	700 x 1631	182	
WWSP 540 SOL	361090	up to LI 28 excluding LIH 26TE up to LA 28 excluding LA 26HS up to SI 30 up to WI 22	500 l nominal volume, 427 l usable capacity, 4.0 m ² heat exchanger area (heating), 1.6 m ² heat exchanger area (solar), 3.2 kWh/24h stand-by loss, 1 1/4" solar and heating connections, 1" hot water connection, 3/4" circulation connection	700 x 1961	218	

Solar hot water cylinders for conventional heating

Solar domestic hot water cylinder made of steel (special enamelling inside) with protection anode, two internal bare-tube heat exchangers for solar and heating, thermometer, polyurethane insulation for minimal stand-by losses, colour white, TK150/DN110 flange. Permissible operating pressure 13 bar;



CWWSP 308 SOL

Order reference	Art.-Nr.	Features	Diameter x Height mm	Weight kg	
CWWSP 308 SOL	361120	500 l nominal volume, 290 l usable capacity, 0.8 m ² heat exchanger area (heating), 1.55 m ² heat exchanger area (solar), 2.6 kWh/24h stand-by loss, 1" solar and heating connections, 1" hot water connection, 3/4" circulation connection	600 x 1834	113	
CWWSP 411 SOL	361130	400 l nominal volume, 380 l usable capacity, 1.05 m ² heat exchanger area (heating), 1.8 m ² heat exchanger area (solar), 2.6 kWh/24h stand-by loss, 1" solar and heating connections, 1" hot water connection, 3/4" circulation connection	700 x 1631	133	

Solar station for hot water

Solar back-up for domestic hot water preparation

Heat exchanger solar station consisting of solar separation system and pump assembly with insulation jackets for integrating solar installations up to 10 m² into the DHW heating system. The solar station enables efficient hot water heating via the heat pump as well as via the solar installation. Modules with primary and secondary cycle consisting of: 2 circulating pumps (WILO- STAR-ST 25/6 and STAR-RS 24/4); 4 ball valves 1" with thermometer, return flow inhibitor, safety assembly with safety valve and 0-10 bar pressure gauge, connection options for expansion vessel (solar controller not included in scope of supply).



SST25

Order reference	Art.-Nr.	Width x Height x Depth mm	Weight kg	
SST25	348430	320x 1050 x 320	19	



SOLP 2 ...

Solar package with 2 collectors

Solar package with 2 collectors for hot water preparation for a household of 2 – 4 people.

- 1 x SOLCU 180 solar controller
- 1 x SOLPU 5 solar station
- 1 x SOLVK 1 expansion vessel connection
- 1 x SOLEV 12 expansion vessel
- 1 x SOLCU 1 solar controller
- 1 x SOLHT 20 heat carrier fluid
- 1 x basic set for collector installation
- 1 x expansion set for collector installation

Order reference	Art.-Nr.	Roofmounting system	
SOLP2 WWPA	361150	Frankfurt tile	
SOLP2 WWBA	361160	Plaintile	
SOLP2 WWWA	361170	Corrugated sheet	
SOLP2 WWFA	361180	Ground mounting kit	

The solar packages can be combined with the CWWSP 308 SOL and WWSP 432 SOL solar cylinders and the BWP 30 HLW hot water heat pump.



SOLP 3 ...

Solar package with 3 collectors

Solar package with 3 collectors for hot water preparation for a household of 4 – 6 people.

- 1 x SOLCU 180 solar controller
- 1 x SOLPU 5 solar station
- 1 x SOLCU 1 solar controller
- 1 x SOLVK 1 expansion vessel connection
- 1 x SOLHT 20 heat carrier fluid
- 1 x SOLEV 18 expansion vessel
- 1 x basic set for collector installation
- 2 x expansion set for installation

Order reference	Art.-Nr.	Roofmounting system	
SOLP3 WWPA	361190	Frankfurt tile	
SOLP3 WWBA	361200	Plaintile	
SOLP3 WWWA	361210	Corrugated sheet	
SOLP3 WWFA	361220	Ground mounting kit	

The solar packages can be combined with the CWWSP 411 SOL and WWSP 432 SOL solar cylinders and the BWP 30 HLW hot water heat pump.



SOLP 4 ...

Solar package with 4 collectors

Solar package with 4 collectors for hot water preparation for a household of 6 – 8 people

- 4 x SOLC 220 solar collector
- 1 x SOLPU 5 solar station
- 1 x SOLCU 1 solar controller
- 1 x SOLVK 1 expansion vessel connection
- 1 x SOLEV 24 expansion vessel
- 2 x SOLHT 20 heat carrier fluid
- 1 x basic set for collector installation
- 3 x expansion set for installation

Order reference	Art.-Nr.	Roofmounting system	
SOLP4 WWPA	361230	Frankfurt tile	
SOLP4 WWBA	361240	Plaintile	
SOLP4 WWWA	361250	Corrugated sheet	
SOLP4 WWFA	361260	Ground mounting kit	

The solar packages can be combined with the WWSP 540 SOL solar cylinder

Solar package with 5 collectors



SOLP 5 ...

Solar package with 5 collectors for hot water preparation and supplementary heating.

- 5 x SOLC 220 solar collector
- 1 x SOLPU V solar station
- 1 x SOLVK 1 expansion vessel connection
- 1 x SOLEV 35 expansion vessel
- 1 x SOLCU 1 solar controller
- 2 x SOLHT 20 heat carrier fluid
- 1 x basic set for collector installation
- 4 x expansion set for installation

Order reference	Art.-Nr.	Roofmounting system	
SOLP 5 HUPA	361270	Frankfurt tile	
SOLP 5 HUBA	361280	Plaintile	
SOLP 5 HUWA	361290	Corrugated sheet	
SOLP 5 HUFA	361300	Ground mounting kit	

The solar packages can be combined with the PWD 750 (RWT 750) combo tank and the PSW 500 (RWT 500) buffer tank.

Solar package with 6 collectors



SOLP 6 ...

Solar packages with 6 collectors for hot water preparation and supplementary heating.

- 6 x SOLC 220 solar collector
- 1 x SOLPU V solar station
- 1 x SOLVK 1 expansion vessel connection
- 1 x SOLEV 35 expansion vessel
- 1 x SOLCU 1 solar controller
- 2 x SOLHT 20 heat carrier fluid
- 1 x basic set for collector installation
- 5 x expansion set for installation

Order reference	Art.-Nr.	Roofmounting system	
SOLP 6 HUPA	361310	Frankfurt tile	
SOLP 6 HUBA	361320	Plaintile	
SOLP 6 HUWA	361330	Corrugated sheet	
SOLP 6 HUFA	361340	Ground mounting kit	

The solar packages can be combined with the PWD 750 (RWT 750) combo tank

Solar package with 7 collectors



SOLP 7 ...

Solar packages with 7 collectors for hot water preparation and supplementary heating.

- 7 x SOLC 220 solar collector
- 1 x SOLPU V solar station
- 1 x SOLVK 1 expansion vessel connection
- 1 x SOLEV 50 expansion vessel
- 1 x SOLCU 1 solar controller
- 3 x SOLHT 20 heat carrier fluid
- 1 x basic set for collector installation
- 6 x expansion set for installation

Order reference	Art.-Nr.	Roofmounting system	
SOLP 7 HUPA	361350	Frankfurt tile	
SOLP 7 HUBA	361360	Plaintile	
SOLP 7 HUWA	361370	Corrugated sheet	
SOLP 7 HUFA	361380	Ground mounting kit	

The solar packages can be combined with the PWD 750 (RWT 750) combo tank

Solar package with 8 collectors



SOLP 8 ...

Solar packages with 8 collectors for hot water preparation and supplementary heating.

- 8 x SOLC 220 solar collector
- 1 x SOLPU V solar station
- 1 x SOLVK 1 expansion vessel connection
- 1 x SOLEV 50 expansion vessel
- 1 x SOLCU 1 solar controller
- 3 x SOLHT 20 heat carrier fluid
- 1 x basic set for collector installation
- 7 x expansion set for installation

Order reference	Art.-Nr.	Roofmounting system	
SOLP 8 HUPA	361390	Frankfurt tile	
SOLP 8 HUBA	361400	Plaintile	
SOLP 8 HUWA	361410	Corrugated sheet	
SOLP 8 HUFA	361420	Ground mounting kit	

The solar packages can be combined with the PWD 750 (RWT 750) combo tank

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ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Compact design



VFDi...C

- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80% operating time to 37/40% operating time or to 68/70% operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess on the right-hand side panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
VFDi 20C/HFi 212	345010	1250	4	Kolli25	S0E	626x 672 x 250	98	
VFDi 20C/HFi 216	345020	1600						
VFDi 20C/HFi 220	345030	2000						
VFDi 20C/HFi 227 *	345040	2700						
VFDi 30C/HFi 318	345050	1850	6		S0E	776x 672 x 250	137	
VFDi 30C/HFi 324	345060	2400						
VFDi 30C/HFi 330	345070	3000						
VFDi 30C/HFi 340 *	345080	4000						
VFDi 40C/HFi 425	345090	2500	8		S0E	926x 672 x 250	176	
VFDi 40C/HFi 432	345100	3200						
VFDi 40C/HFi 440	345110	4000						
VFDi 40C/HFi 452 *	345120	5200						
VFDi 50C/HFi 540	345130	4000	10		S0E	1076x 672 x 250	215	
VFDi 50C/HFi 550	345140	5000						
VFDi 50C/HFi 564 *	345150	6400						
VFDi 60C/HFi 648	345160	4800	12		S0E	1226x 672 x 250	254	
VFDi 60C/HFi 660	345170	6000						
VFDi 60C/HFi 676 *	345180	7600						
VFDi 70C/HFi 756	345190	5600	14		S0E	1376x 672 x 250	293	
VFDi 70C/HFi 770	345200	7000						
VFDi 70C/HFi 790 *	345210	9000						

* for rated charge time $t_F = 5$ and 6 hours
Depth plus 35 mm wall connection

ThermoComfort storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Compact design



VFMi ...C

- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Thermomechanical charge controller for connection to AC charge control (230 V alternating voltage)
- AC control system 230V AC, 80 % operating time
- Infinitely variable manual selection of the charge volume for operation without charge control
- Radiator kit for optimised device adaptation to charge type and heat consumption
- Discharging via special accessory wall-mounted or integrated room temperature controller
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
VFMi 20C/HFi 212	345220	1250	4	Kolli25	20E	626x 672 x 250	98	
VFMi 20C/HFi 216	345230	1600						
VFMi 20C/HFi 220	345240	2000						
VFMi 20C/HFi 227 *	345250	2700						
VFMi 30C/HFi 318	345260	1850	6		30E	776x 672 x 250	137	
VFMi 30C/HFi 324	345270	2400						
VFMi 30C/HFi 330	345280	3000						
VFMi 30C/HFi 340 *	345290	4000						
VFMi 40C/HFi 425	345300	2500	8		40E	926x 672 x 250	176	
VFMi 40C/HFi 432	345310	3200						
VFMi 40C/HFi 440	345320	4000						
VFMi 40C/HFi 452 *	345330	5200						
VFMi 50C/HFi 540	345340	4000	10		50E	1076x 672 x 250	215	
VFMi 50C/HFi 550	345350	5000						
VFMi 50C/HFi 564 *	345360	6400						
VFMi 60C/HFi 648	345370	4800	12		60E	1226x 672 x 250	254	
VFMi 60C/HFi 660	345380	6000						
VFMi 60C/HFi 676 *	345390	7600						
VFMi 70C/HFi 756	345400	5600	14		70E	1376x 672 x 250	293	
VFMi 70C/HFi 770	345410	7000						
VFMi 70C/HFi 790 *	345420	9000						

* for rated charge time $t_f = 5$ and 6 hours
Depth plus 35 mm wall connection

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Slim Line Casing



- With wall bracket for mounting on load-bearing brickwork included as standard
- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80 % operating time to 37/40 % operating time or to 68/70 % operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess on the right-hand side panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- **Can be extended to a two-circuit storage heater (using kit GH 18) for controlled storage heating GEH (charge type of EnBW / ODR)**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
FSD 12C/HS 1207	345430	750	2	Kolli18	B2E	636x 533 x 214	75	
FSD 12C/HS 1209	345440	900						
FSD 12C/HS 1210	345450	1050						
FSD 12C/HS 1212	345460	1200						
FSD 18C/HS 1811	345470	1150	3		B8E	786x 533 x 214	104	
FSD 18C/HS 1813	345480	1350						
FSD 18C/HS 1816	345490	1600						
FSD 18C/HS 1818	345500	1800						
FSD 24C/HS 2415	345510	1500	4		B4E	936x 533 x 214	133	
FSD 24C/HS 2418	345520	1800						
FSD 24C/HS 2421	345530	2100						
FSD 24C/HS 2424	345540	2400						
FSD 24C/HSZ 2425	345550	2550						
FSD 30C/HS 3019	345560	1900	5		B0E	1086x 533 x 214	162	
FSD 30C/HS 3022	345570	2250						
FSD 30C/HS 3026	345580	2650						
FSD 30C/HS 3030	345590	3000						
FSD 30C/HSZ 3032	345600	3250						
FSD 36C/HS 3622	345610	2250	6		B6E	1236x 533 x 214	191	
FSD 36C/HS 3627	345620	2700						
FSD 36C/HS 3631	345630	3150						
FSD 36C/HS 3636	345640	3600						
FSD 42C/HS 4226	345650	2600	7		B2E	1386x 533 x 214	220	
FSD 42C/HS 4231	345660	3150						
FSD 42C/HS 4237	345670	3700						
FSD 42C/HS 4242	345680	4200						
FSD 48C/HS 4830	345690	3000	8		B8E	1536x 533 x 214	249	
FSD 48C/HS 4836	345700	3600						
FSD 48C/HS 4842	345710	4200						
FSD 48C/HS 4848	345720	4800						

Depth = installation depth incl. wall connection

HSZ radiator only for the EnBW / ODR charge type GEH (controlled storage heating)

phase out: HS 1207, HS 1811, HS 2415, HS 3019, HS 3622, HS 4226, HS 4830

The two-circuit cylinder kit **GH 18** enables the use of the basic device FSD 12C – FSD 36C as a two-circuit storage heater for controlled storage heating (GEH) of the EnBW / ODR utility company.

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Low series



VNDi ... C

- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80 % operating time to 37/40 % operating time or to 68/70 % operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess of the front panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
VNDi 30C/HNi 3024	346030	2400	8	Kolli25N	N30E	890x 484 x 250	156	
VNDi 30C/HNi 3030	346040	3000						
VNDi 36C/HNi 3629	346050	2900	10		N36E	1040x 484 x 250	191	
VNDi 36C/HNi 3636	346060	3600						
VNDi 43C/HNi 4334	346070	3450	12		N43E	1190x 484 x 250	226	
VNDi 43C/HNi 4343	346080	4300						
VNDi 50C/HNi 5040	346090	4000	14		N50E	1340x 484 x 250	261	
VNDi 50C/HNi 5050	346100	5000						

Depth plus 35 mm wall connection

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Low design with minimal width



VTDi ... C

- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80 % operating time to 37/40 % operating time or to 68/70 % operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- 5 selectable switch-off temperatures for charge optimisation
- Positive/negative fault behaviour adjustable on the duo charge controller
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via special accessory wall-mounted or integrated room temperature controller
- High-performance, low-noise radial fan
- Operator controls in the control recess of the front panel
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A day current supplementary heater can be installed as a special accessory for additional/transitional heating
- Powder-coated sheet-steel casing
- Casing colour **traffic white** (similar to RAL 9016), air outlet grid **birch grey**
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
VTDi 45C/HTi 4536	346190	3600	6	Kolli36T	145E	740x 654 x 360	195	
VTDi 45C/HTi 4545	346200	4500						
VTDi 60C/HTi 6048	346210	4800	8		160E	890x 654 x 360	251	
VTDi 60C/HTi 6060	346220	6000						
VTDi 75C/HTi 7560	346230	6000	10		175E	1040x 654 x 360	307	
VTDi 75C/HTi 7575	346240	7500						

Depth plus 35 mm wall connection

ThermoComfort duo-electronic storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Hearth design



VKD 24 with VKE 20

- Can be integrated, mounted under a worktop or panelled with solid kitchen panelling
- Digital electronic duo charge controller with 2 control inputs for optional connection to DC charge controls (0.91–1.43 V) or to AC charge controls (AC 230 V, % operating time)
- AC control system adjustable from 80 % operating time to 37/40 % operating time or to 68/70 % operating time
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Integrated thermal enable contactor
- Suitable for direct control without heating contactor
- Infinitely variable manual selection of the charge volume for operation without charge control
- Discharging via room temperature controller integrated as standard
- Radiator kit for optimised device adaptation to charge type and heat consumption
- A "supplementary heating relay kit" can be installed as a special accessory for additional/transitional heating
- Casing colour kitchen white
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
VKD 24/HK 219F	346310	1900	2	Kolli33	124E	450x 840 x 570	133	
VKD 24/HK 224F	346320	2400						

Built-under unit delivered without front cover and worktop
Height adjustable

PERMATHERM® storage heaters

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Compact design Universa



ESS ... K

- Storage heater in compact design
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80 % operating time
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
ESS 2012 K	IC251335	1250	4	Kolli25	90E	626x 672 x 250	98	
ESS 2016 K	IC251337	1600						
ESS 2020 K	IC251339	2000						
ESS 2027 K *	IC251344	2700						
ESS 3018 K	IC251347	1850	6		90E	776x 672 x 250	137	
ESS 3024 K	IC251351	2400						
ESS 3030 K	IC251355	3000						
ESS 3040 K *	IC251357	4000						
ESS 4025 K	IC251362	2500	8		90E	926x 672 x 250	176	
ESS 4032 K	IC251365	3200						
ESS 4040 K	IC251367	4000						
ESS 4052 K *	IC251369	5200						
ESS 5040 K	IC251374	4000	10		90E	1076x 672 x 250	215	
ESS 5050 K	IC251376	5000						
ESS 5064 K *	IC251378	6400						
ESS 6048 K	IC251386	4800	12		90E	1226x 672 x 250	254	
ESS 6060 K	IC251388	6000						
ESS 6076 K *	IC251390	7600						
ESS 7056 K	IC251397	5600	14		90E	1376x 672 x 250	293	
ESS 7070 K	IC251399	7000						
ESS 7090 K *	IC251401	9000						

* for rated charge time $t_c = 5$ and 6 hours
Depth plus 35 mm wall connection

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Slim Line Casing Optima



ESF ... K

- Storage heater in flat design
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230 V AC, 80 % operating time
- Wall mounting for load-bearing brickwork
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
ESF 1207 K	IC260070	750	2	Kolli18	H2E	636x 533 x 214	75	
ESF 1209 K	IC260080	900						
ESF 1210 K	IC260090	1050						
ESF 1212 K	IC260100	1200						
ESF 1811 K	IC260110	1150	3		H8E	786x 533 x 214	104	
ESF 1813 K	IC260120	1350						
ESF 1816 K	IC260130	1600						
ESF 1818 K	IC260140	1800						
ESF 2415 K	IC260150	1500	4		B4E	936x 533 x 214	133	
ESF 2418 K	IC260160	1800						
ESF 2421 K	IC260170	2100						
ESF 2424 K	IC260180	2400						
ESF 3019 K	IC260190	1900	5		B0E	1086x 533 x 214	162	
ESF 3022 K	IC260200	2250						
ESF 3026 K	IC260210	2650						
ESF 3030 K	IC260220	3000						
ESF 3622 K	IC260230	2250	6		B6E	1236x 533 x 214	191	
ESF 3627 K	IC260240	2700						
ESF 3631 K	IC260250	3150						
ESF 3636 K	IC260260	3600						
ESF 4226 K	IC260270	2600	7		H2E	1386x 533 x 214	220	
ESF 4231 K	IC260280	3150						
ESF 4237 K	IC260290	3700						
ESF 4242 K	IC260300	4200						
ESF 4830 K	IC260310	3000	8		H8E	1536x 533 x 214	249	
ESF 4836 K	IC260320	3600						
ESF 4842 K	IC260330	4200						
ESF 4848 K	IC260340	4800						

Depth = installation depth incl. wall connection

phase out: ESF 1207, ESF 1811, ESF 2415, ESF 3019, ESF 3622, ESF 4226, ESF 4830

PERMATHERM® storage heaters

Connection voltage 1/N/PE ~230 V, 50 Hz

Two-circuit unit in slim line casing Optima



ESFZ ... K

- Two-circuit storage heater for controlled electrical heating GEH (charge type of the EnBW/ODR)
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Thermomechanical AC charge controller
- AC control system 230V AC, 80% operating time
- Wall mounting for load-bearing brickwork
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Key solution: Kit ESF ZKM is used to convert the basic device into a two-circuit system as required for controlled storage heating by the EnBW/ODR utility company and thus into a two-circuit storage heater.
- Delivery form: casing, brick bundles and radiator kit
- Including two-circuit storage heater kit ESF ZKM
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
ESFZ 1212 K	IC260350	800 400	2	Kolli18	12E	636x 533 x 214	75	
ESFZ 1818 K	IC260360	1200 600	3		18E	786x 533 x 214	104	
ESFZ 2425 K	IC260370	1600 950	4		24E	936x 533 x 214	133	
ESFZ 3032 K	IC260380	2000 1250	5		30E	1086x 533 x 214	162	
ESFZ 3636 K	IC260390	2400 1200	6		36E	1236x 533 x 214	191	

Depth = installation depth incl. wall connection

The rated power is made up of the storage part and the storage-free part

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Low series



ESN ... K

- For installation under low windows
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- DYNAMIC discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80% operating time
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
ESN 3024 K	IC251288	2400	8	Kolli25N	30E	890x 484 x 250	156	
ESN 3030 K	IC251293	3000						
ESN 3629 K	IC251291	2900	10		36E	1040x 484 x 250	191	
ESN 3636 K	IC251295	3600						
ESN 4334 K	IC251299	3450	12		43E	1190x 484 x 250	226	
ESN 4343 K	IC251301	4300						
ESN 5040 K	IC251305	4000	14		50E	1340x 484 x 250	261	
ESN 5050 K	IC251307	5000						

Depth plus 35 mm wall connection

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Extra-deep



EST ... K

- For living rooms with minimal floor space and a high heating requirement.
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- DYNAMIC discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80% operating time
- Casing colour: sepia white (similar to RAL 9001), grey-brown air outlet grid
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
EST 60481 K	IC260510	4800	8	Kolli36T	60E	890x 654 x 360	251	
EST 60601 K	IC260520	6000						
EST 75601 K	IC260530		10		75E	1040x 654 x 360	307	
EST 75751 K	IC260540	7500						

Depth plus 35 mm wall connection

PERMATHERM® storage heaters

Connection voltage 3/N/PE ~400 V, 50 Hz

Hearth design can be integrated



ESK ... K with EZK ES

- Hearth design can be panelled with solid kitchen panelling
- High-grade hard-shell core thermal insulation of natural vermiculite with Microtherm®
- Dynamic discharge
- Thermomechanical AC charge controller
- AC control system 230V AC, 80 % operating time
- built-in room temperature controller
- ON/OFF switch for "supplementary heating"
- Temperature lowering at night can be remote controlled e.g. using a timer.
- Control panel kitchen white, base grey-brown
- Delivery form: casing, brick bundles and radiator kit
- VDE approval mark

Order reference	Art.-Nr.	Rated power W	Number of brick bundles	Brickbundle type	Size	Width x Height x Depth mm	Weight kg	
ESK 2419 K	IC251318	1900	2	Kolli33	124E	450x 840 x 570	110	
ESK 2424 K	IC251320	2400						

Height adjustable

Accessories

Supplementary kit – hearth storage heater in free-standing

Supplementary kit for converting the built-under unit to a stand-alone unit consisting of: front cover, worktop, fixing accessories (worktop height: 40 mm), colour kitchen white.



VKE20

Order reference	Art.-Nr.	for device type	
VKE20	317820	VKD24	
EZKES	IC251314	ESK24.. K	

Two-circuit cylinder kit

With the basic device GH 18 the devices FSD 12C – FSD 36C and VKD 24 can be upgraded to two-circuit storage heaters. With this, the two-circuit system for required for controlled storage heating (GEH) by the EnBW / ODR is made possible.

Key solution:

2/3 of the rated power is switched as P_s (storage part) and 1/3 of the rated power as P_{sf} (storage-free part).



GH18

Order reference	Art.-Nr.	for device type	
GH18	325100	VKD24 FSD 12C – FSD 36C	

Supplementary kit two-circuit storage heater

for PERMATHERM® Optima (flat design) F 12E – F 36E and PERMATHERM® hearth storage heater for converting to two-circuit system for controlled electric heating GEH (charge type of the EnBW/ODR).



ESFZKM

Order reference	Art.-Nr.	for device type	
ESFZKM	IC260600	ESF 12.. K – ESF 36.. K ESK 24.. K	

Integrated room temperature controller



RTID 31 / RTED 30



RTEV 99



ZHi ... E

Order reference	Art.-Nr.	for device type	Features
RTID 31	324530	VFDi 20C – VFDi 70C FSD 12C – FSD 48C VNDi 30C – VNDi 50C VTDi 45C – VTDi 75C	Integrated electronic speed controller (wave packet control), complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8°C to 30°C.
RTED 30	324520		Integrated electronic controller, complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8°C to 30°C.
RTEV 99	333990	VFDi...C & ESS...K FSD...C & ESF...K VNDi...C & ESN...K VTDi...C & EST...K	Integrated electromechanical controller with thermal feedback, complete universal kit, with ON/OFF switch and switch for "supplementary" heating with control lamps. Control panel in control recess, 230 V / 10 (4) A, controlling range 5°C to 30°C.

Caution: not for use in combination with water-proofing kits

Day current supplementary heating

Day current supplementary heating kit for installation in the storage heater. Functions as direct heating if heat is immediately required and the storage heater is uncharged (e.g. transition periods; guestrooms).

Note: An integrated room temperature controller or wall-mounted room temperature controller with switching output "supplementary heating" is required for operation. For installation in Dimplex and PERMATHERM storage heaters.*

Order reference	Art.-Nr.	Rated power W	for device type
ZHi 050 E	341950	500	S20E F 12E
ZHi 070 E	341960	700	S 30E – S 70E F 18E – F 48E N 30E – N 50E T 45E – T 75E
ZHi 110 E	341970	1100	S 40E – S 70E F 36E – F 48E N 30E – N 50E T 60E – T 75E
ZHi 150 E	341980	1500	S 50E – S 70E F 48E N 36E – N 50E T 75E
ZHi 200 E	341990	2000	S 50E – S 70E N 36E – N 50E T 75E

Day current supplementary heating relay kit

A third of the rated power of the kitchen storage heater is switched to direct heating if instant heat is required and the storage heater is uncharged (e.g. transition periods, guestrooms).

Order reference	Art.-Nr.	for device type
RZ20	315670	VKD24 ESK 24.. K



RZ20

Floor brackets

For installation of electric storage heaters with 10 cm ground clearance, floor mounting, angle adjustable, suitable for skirting board, can be used for deep-pile carpeting, suitable for wall and floor mounting, can be secured against tipping over, fixing accessories (package contents: set = 2 items)

Order reference	Art.-Nr.	for device type	Coating colour
BKDi 25	328580	VFDi 20C – VFDi 70C VNDi 30C – VNDi 50C	both grey
EZBKs	IC251270	ESS 20.. K – ESS 70.. K ESN 30.. K – ESN 50.. K	grey-brown



BKDi 25

Floor brackets



WIO 18

For wall/floor mounting if the brickwork cannot bear loads and for free-standing installation. Painted profile angle with unscrewable ground support and fixing accessories. 10.4 cm ground clearance, (package contents: set = 2 items)

Order reference	Art.-Nr.	for device type	Casing colour	
WIO 18	324470	FSD12C – FSD 48C	both grey	
EZ KK F	IC251133	ESF12.. K – ESF 48.. K	grey-brown	

Ground support for storage heaters



BIO 18

For wall/floor mounting if the brickwork cannot bear heavy loads, used in combination with serial bracket, 10.4 cm ground clearance (package contents: set = 2 items).

Order reference	Art.-Nr.	for device type	Casing colour	
BIO 18	326480	FSD12C – FSD 48C	both grey	
EZ BA F	IC251134	ESF12.. K – ESF 48.. K	grey-brown	

Base plate for storage heaters



UPLi..

UPL..

Heat-insulating calcium-silicate based base plate prevents pressure marks and discolouration when devices are installed on light-coloured carpeting, temperature-sensitive floor coverings and pressure-sensitive parquet floors.

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	
UPLi20	328220	S20E	626x 10 x 260	
UPLi30	328230	S30E	776x 10 x 260	
UPLi40	328240	S40E	926x 10 x 260	
UPLi50	328250	S50E	1076x 10 x 260	
UPLi60	328260	S60E	1226x 10 x 260	
UPLi70	328270	S70E	1376x 10 x 260	
UPL12	324330	F12E	630x 10 x 200	
UPL18	324340	F18E	780x 10 x 200	
UPL24	324350	F24E	930x 10 x 200	
UPL30	324360	F30E	1080x 10 x 200	
UPL36	324370	F36E	1230x 10 x 200	
UPL42	324380	F42E	1380x 10 x 200	
UPL48	324390	F48E	1530x 10 x 200	
UPL 30 N	343190	N30E	890x 10 x 260	
UPL 36 N	343200	N36E	1040x 10 x 260	
UPL 43 N	343210	N43E	1190x 10 x 260	
UPL 50 N	343220	N50E	1340x 10 x 260	
UPL45 T	338680	T45E	760x 10 x 370	
UPL60 T	338690	T60E	910x 10 x 370	
UPL75 T	338700	T75E	1060x 10 x 370	

Water-proofing kit

Enables installation of storage heaters according to VDE regulations. Do not use in combination with special accessories for the integrated room temperature controller. Degree of protection IP X4 (splash water protection).

Order reference	Art.-Nr.	for device type	
WS 25 i	328590	S20E S 30E	
BWS 25 N	335670	N30E N 36E	
TWS 12	325850	F12E	
TWS 18	325860	F18E	
TWS 24	325870	F24E	

WS 25 i

Wall fixing bracket

Additional protection against tipping over for electric storage heaters, left.

Order reference	Art.-Nr.	for device type	
EZ ZW 1	IC251271	S 20E – S 70E N 30E – N 50E	

EZ ZW 1

Conversion kit operating time control system

For electric storage heaters with thermomechanical charge controller for adjustment to 37/40 % operating time control system.

Order reference	Art.-Nr.	for device type	
EZ US 8037 2	IC251198	ESS ... K ESF ... K ESN ... K EST ... K & ESK 24... K	

EZ US 8037 2

Thermal enable contactor

Thermo relay installation kit for charge enable via safety output control signal (direct control without heating contactor with auxiliary relay)

Order reference	Art.-Nr.	for device type	
EZKFS	IC260610	ESS ... K ESF ... K ESN ... K EST ... K & ESK ... K	

EZKFS

Rear panelling for Dimplex storage heaters

For covering the rear of the device in the event of free-standing installation. Colour: traffic white (similar to RAL 9016).

Order reference	Art.-Nr.	for device type	Width x Height x Depth mm	
DRWi 20C	344370	VFDi20C	562x 627 x 41	
DRWi 30C	344380	VFDi30C	712x 627 x 41	
DRWi 40C	344390	VFDi40C	862x 627 x 41	
DRWi 50C	344400	VFDi50C	1012x 627 x 41	
DRWi 60C	344410	VFDi60C	1162x 627 x 41	
DRWi 70C	344420	VFDi70C	1312x 627 x 41	
DRW 36NC	344440	VNDi36C	1012x 457 x 41	
DRW 43NC	344450	VNDi43C	1162x 457 x 41	

DRWi ...

Electronic charge controller



LRD 2000 plus



LR100



P 10 K

Order reference	Art.-Nr.	Features	
LRD 2000 plus	338830	Digital electronic DC/AC charge controller with two control inputs for ThermoComfort duo-electronic VFDi..(C), VFD.., FSD..(C), VNDi..(C), VTDi..(C), and VKD.. storage heaters, optional connection to DC charge control (0.91–1.43 V) or an AC charge control (AC 230 V, % operating time), with jumper for adjustment of AC control system from 80% operating time to 72/68% operating time or to 37/40% operating time, jumper for selectable switch-off temperatures, plug position 520+ for raising the target charge rate by 5% as compared to the central control unit default, potentiometer 10 kΩ included in the scope of supply.	
LR100	338840	Electronic DC charge controller (control signal DC 0.91–1.43 V) for ThermoComfort electronic VF 20–70, VF 20–70 HY, VN 30/40, VK 24, VF 75, FS 12–36, and FZ 12–36 storage heaters.	
LR90	338850	Electronic DC charge controller (control signal DC 0.91–1.43 V), replacement device for LR 88 S, LR 50 S, LR 50/300, LR 45 S, LR 60/230, LR 60/300, and RG 6000 charge controllers.	
KBS12L	348870	Cable harness with 12-pole cable connector for use in combination with LR90 and LR100 DC charge controllers; (potentiometer not included in the scope of supply)	

Intensity actuator

Order reference	Art.-Nr.	Features	
P 10 K	338860	Potentiometer (10 kΩ), for storage heaters ThermoComfort duo-electronic (with LRD 2000, LRD 2000 plus charge controllers) and ThermoComfort electronic (with LR 100 charge controller).	
P360	338870	Potentiometer (360 Ω), for storage heaters with electronic charge control (LR 90, LR 88 S, LR 50 S, LR 50/300, LR 45 S, LR 60/230, LR 60/300 and RG 6000 charge controllers).	

Residual heat sensor



RF2000



RF90

Order reference	Art.-Nr.	Features	
RF2000	338880	PTC residual heat sensor for storage heaters with LRD 2000, LRD 2000 plus electronic DC/AC charge controllers and LR 100 electronic DC charge controller (107 Ω / 20 °C).	
RF90	338890	PTC residual heat sensor for storage heaters with LR 90, LR 88 S, LR 60.., LR 50.., and LR 45 S electronic DC charge controllers (732 Ω / 20 °C).	

Thermo relay



THR3

Order reference	Art.-Nr.	Features	
THR3	338900	3-pole thermo relay for storage heaters with electronic charge control. Can be used in combination with LRD 2000, LRD 2000plus, LR 100, LR 90, LR 88 S, LR 60 .., LR 50.., LR 45 S, and RG 6000.	

Radial fan

Radial fan, right, complete for Dimplex and PERMATHERM® storage heaters



RL 15R / 25R



RL 15 RF

Order reference	Art.-Nr.	for device type	
RL15R	344960	S 20(E) – S 40(E) N 30(E) – N 43(E) T 45(E) – T 60(E)	
RL25R	344970	S 50(E) – S 70(E) N 50(E) T 75(E)	
RL15RF	351880	F 12(E) – F 48(E)	

Capillary tube charge controller



ALR 80 AC

Order reference	Art.-Nr.	Features	
ALR 80 AC	351870	Thermomechanical AC charge controller (3-pole; 80% operating time system) for Dimplex VFMi.. and PERMATHERM® ESS., ESF., EST., ESN., and ESK.. storage heaters	

Radiant panel heater FPE series

Connection voltage 1/N/PE ~230 V, 50 Hz

horizontal model

Degree of protection IP 20

Protection class I



FPE ... H

Wall mounting using wall bracket, connection cable for fixed connection, high-quality metal casing, aluminium surface heating element, electronic infinitely variable room thermostat, protection against overheating, function switch for ON / OFF/ Antifreeze / Lower. Lowering can be centrally regulated using an external regulator e. g. timer Programming using module RMT 2 possible.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
FPE 051 H	348740	500	515x 440 x 112	4.3	
FPE 101 H	348750	1000	620x 440 x 112	5.3	
FPE 151 H	348760	1500	830x 440 x 112	7.2	
FPE 201 H	348770	2000	1040x 440 x 112	9.0	

Depth incl. wall clearance

Radiant panel heater FPE series

Connection voltage 1/N/PE ~230 V, 50 Hz

vertical model

Degree of protection IP 20

Protection class I



FPE... V

Wall mounting using wall bracket, connection cable for fixed connection, high-quality metal casing, aluminium surface heating element, electronic infinitely variable room thermostat, protection against overheating, function switch for ON / OFF/ Antifreeze / Lower. Lowering can be centrally regulated using an external regulator e. g. timer Programming using module RMT 2 possible.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
FPE101 V	348780	1000	440x 830 x 112	7.6	
FPE201 V	348790	2000	440x 1145 x 112	10.1	

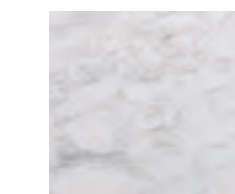
Depth incl. wall clearance

Natural stone heating

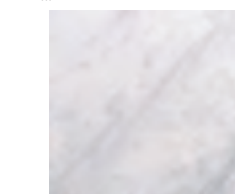
Connection voltage 1/N ~230 V, 50 Hz

Degree of protection IP 25

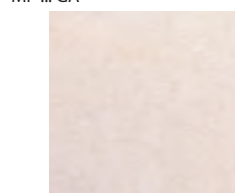
Protection class II



MP... VAR



MP ... GA



MP ... SYA

Natural stone heating for horizontal or vertical wall mounting using the mounting kit included in the scope of supply, main heat provided by heating pipes integrated in the stone, special pipe routing for especially uniform surface temperature, dual overtemperature protection, connecting cable for fixed connection approx. 1.3 m, must be controlled via external room temperature controller. External room temperature controller **RT 204 U** and **RT 104 ST** suitable for MP natural stone heating.

Order reference	Art.-Nr.	Type of stone	Rated power W	Width x Height x Depth mm	Weight kg	
MP35 VAR	343860	Varios	350	600x 400 x 70	21	
MP65 VAR	343870		650	1000x 400 x 70	35	
MP85 VAR	343880		850	1000x 500 x 70	44	
MP115 VAR	343890		1150	1000x 600 x 70	52	
MP145 VAR	343900		1450	1250x 600 x 70	62	
MP 35 GA	343910	Galaxis	350	600x 400 x 70	21	
MP 65 GA	343920		650	1000x 400 x 70	35	
MP 85 GA	343930		850	1000x 500 x 70	44	
MP 115 GA	343940		1150	1000x 600 x 70	52	
MP 145 GA	343950		1450	1250x 600 x 70	62	
MP 35 SYA	343960	Sylvia Antik	350	600x 400 x 70	21	
MP 65 SYA	343970		650	1000x 400 x 70	35	
MP 85 SYA	343980		850	1000x 500 x 70	44	
MP 115 SYA	343990		1150	1000x 600 x 70	52	
MP 145 SYA	344000		1450	1250x 600 x 70	62	

Natural stone heaters are unique natural products. Variations in colour and structure compared to the picture are therefore a sign of individuality.

Design wall convector GFP series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP X4
Protection class I



GFP 200 B



GFP200 W

Design convector with precise electronic room temperature regulation, infinitely adjustable +5 °C to +30 °C, antifreeze setting, connecting lead for fixed connection, high-grade metal casing with easy-care glass front, ON/OFF switch, temperature lowering using a programming module or external control of the control line possible, e. g. using a timer, switch etc. , protection against overheating, fold-down wall support. Programming is possible using module RMT 2.

Order reference	Art.-Nr.	Rated power W	Casing colour	Width x Height x Depth mm	Weight kg	
GFP 200 B	356180	2000	black	940x 565 x 107	19.4	
GFP200 W	356170		white			

Depth incl. wall clearance

Wall convectors KSE series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I



KSE...

Wall mounting using a wall bracket, connection cable for fixed connection, high-grade metal casing, alu finned heating element, electronic infinitely variable room thermostat 7 °C to 29 °C, protection against overheating, function switch for ON / OFF/ Antifreeze / Lowering, lowering also centrally using external controls e. g. a timer. Programming using module **RMT 2** possible.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
KSE100	335320	1000	420x 430 x 105	4.2	
KSE150	335340	1500	580x 430 x 105	5.5	
KSE200	335360	2000	740x 430 x 105	6.6	

Low profile panel convectors KLE series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I



KLE...

Wall mounting using wall bracket, connection cable for fixed connection, high-quality metal casing, aluminium finned heating element, electronic infinitely variable room thermostat 7 °C, protection against overheating, function switch for ON / OFF/ Antifreeze / Lower. Lowering can be centrally regulated using an external regulator e. g. timer. Programming using module **RMT 2** possible.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
KLE075	335380	750	820x 220 x 105	4.7	
KLE125	335390	1250	1060x 220 x 105	5.9	
KLE150	337960	1500	1300x 220 x 105	7.1	

Programming cassette RMT

incl. master function



RMT 2

Order reference	Art.-Nr.	Features	
RMT 2	362920	Programming cassette connectable to radiant panel heaters and convectors of the GPE, GFP, FPE, EPX, KSE and KLE series. Clearly laid out LC Display; seven specified programs and an individual program to set the heating and lowering times. Each day of the week can have one of the programs assigned to it. Where several eocomfort devices are used together with a common control line, a programming cassette can be used to control up to 20 devices simultaneously.	

Wall convectors EPX series

Connection voltage 1/N/PE ~230 V, 50 Hz

electronically regulated

Degree of protection IP X4

Protection class I

Precise electronic room temperature control, infinitely variable from 5°C to 30°C, antifreeze setting, connection cable for fixed connection, ON/OFF switch, temperature lowering using a programming module or external control of the control line e.g. timer or switch possible. Protection against overheating, fold-down wall bracket, high-quality metal casing.



EPX 2000

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
EPX 500	351530	500	448x 430 x 115	4.8	
EPX 750	351540	750	618x 430 x 115	6.2	
EPX 1000	351550	1000			
EPX 1500	351560	1500	686x 430 x 115	6.6	
EPX 2000	351570	2000	858x 430 x 115	8.0	
EPX 2500	351580	2500	858x 430 x 145	8.5	

Programming cassette EPX, GFP, SRX convectors



RX PW 1



RX TI RB

Order reference	Art.-Nr.	Features	
RXTI 24	RXTI24	24h programming cassette with LC display, connectable to EPX wall convectors. Four IN and OUT times freely programmable, lit display, key lock. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.	
RX PW 1	RXPW1	Weekly programming cassette with LC display, connectable to EPX wall convectors, up to four programs can be set for a weekend block (Sat-Sun) or a workday block (Mon-Fri), the IN and OUT switch times are set, with lit display and key lock. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.	
RXTI RB	RXTIRB	Limited specified heating periods; programming cassette for setting a heating period from 0.5 – 4.0 hours, adjustable in 0.5 hour steps, when the specified heating period ends, the device shuts off or turns to antifreeze mode. Where several EPX devices are connected using a control line, a programming cassette can be used to control these devices simultaneously. Similarly, devices from the FPE, GPE, GFP, KSE and KLE series can be connected to the control line.	

Wall convectors PLX series

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP X4

Protection class I

High-quality metal casing, connection cable with connector, infinitely variable room thermostat 5°C to 30°C, ON/OFF switch, 2 heating levels (not for PLX 500), controller cover, protection against overheating, fold-down wall support.



PLX2000

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
PLX500	351450	500	448x 430 x 115	4.8	
PLX750	351460	750	618x 430 x 115	6.2	
PLX1000	351470	1000			
PLX1500	351480	1500	686x 430 x 115	6.6	
PLX2000	351490	2000	858x 430 x 115	8.0	
PLX2500	351500	2500	858x 430 x 145	8.5	
PLX3000	351510	3000		8.6	

Wall convectors PLX series with timer

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 20

Protection class I

High-grade metal casing, connection cable with plug, infinitely variable room thermostat 5°C to 30°C, ON/OFF switch, 2 heating levels, controls cover, protection against overheating, removable fold-down wall support. With mechanical 24-hour timer.



PLX2000 TI

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
PLX2000 TI	351520	2000	858x 430 x 115	8.0	

Wall convectors DXW series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I



DXW 330

Infinitely variable thermostat, fold-down wall bracket, sheet-steel casing, connection cable for fixed connection, ON/OFF switch, 2 heating levels, (DXW 315 to DXW 330).

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
DXW 307	342990	750	577x 367 x 124	4.4	
DXW 310	343000	1000			
DXW 315	343010	1500			
DXW 320	343020	2000			
DXW 325	343030	2500	697x 367 x 124	5.1	
DXW 330	343040	3000			

Free-standing convectors ECW series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I



ECW 934



ECW 937 T

Infinitely variable thermostat, 2 heating levels, indicator lamp, connection cable with plug, wall mounting with accompanying accessories possible.

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
ECW 934	343050	2000		577x 432 x 205	4.1	
ECW 937 T	343060		With fan level, cold air level.		4.3	

Depth for wall mounting: 90 mm

Bathroom fan heater

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24
Protection class I



EF12/20



EF12/20 TI

Solid sheet-steel casing, infinitely variable room thermostat, protection against overheating, antifreeze mode, connection cable with plug.

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
EF12/20	357050	2000		300x 405 x 120	3.2	
EF12/20 TI	357060		With 60-minute timer		3.3	
EF12/20 TID	357070		With 24-hour timer.			
EF12/10	358710	1000			3.2	

Towel dryer combined with bathroom fan heater

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I



TRFW201

Combination of radiant panel heater, towel dryer and bathroom fan heater, electronic room thermostat, electronic timer for ventilation operation 0.5 h / 1.0 h / 2.0 h, protection against overheating, lint filter, indicator lamp for heating operation, connection cable for fixed connection, temperature lowering possible via external control of the control line e. g. timer, infinitely variable hangers with optional left or right mounting.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
TRFW101	348710	1000	431x 1058 x 173	17.5	
TRFW151	348720	1500	431x 1472 x 173	20.0	
TRFW201	348730	2000			

Device depth without hanger; hanger depth 65 – 95 mm
phase out:

Towel dryer/bathroom fan heater TRFB

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 24
Protection class II

Combination of radiant panel heater, towel dryer and bathroom fan heater, electronic room thermostat, electronic timer for ventilation operation 0.5 hour / 1.0 hour / 2.0 hours, protection against overheating, lint filter, indicator lamp for heating operation, connection cable for fixed connection, temperature lowering via external control of the control line e. g. a timer possible.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
TRFB150	354900	1500	470x 1010 x 267	13	

Dimensions without hanger (W x H x D) in mm: 440 x 1010 x 121



TRFB150

Towel dryers DTR series

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24
Protection class I

Dry heating element for short heat-up time, connecting line with plug and ON/OFF switch, cable connection on the right, protection against overheating, without an integrated thermostat.

Order reference	Art.-Nr.	Rated power W	Casing colour	Width x Height x Depth mm	Weight kg	
DTR 350 C	354860	300	chromed	602x 843 x 115	7.9	
DTR 350 W	354850	350	white			
DTR 500 W	360010	450		602x 1406 x 115	15.7	



DTR 350 C



DTR 350 W

Wall-mounted fan heater with pull switch

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 22
Protection class II

2-level control, downwards air outlet, thermostat adjustable in the device with 3 temperature positions, fixed connection, 1 kW / 2 kW connected load can be chosen on the device, protection against overheating, white plastic casing.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
FX20 V	342490	2000	229x 242 x 109	1.4	



FX20 V

Unique wall convectors

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24
Protection class I



2NC8 102 4S

To be mounted using a wall bracket with outlet for fixed connection, electronic thermostat, lowering using control line or radio module, high-quality aluminium finned heating element, galvanised and powder-coated casing, colour white similar to RAL 9010, On/Off switch.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
2NC8 102 4S	2NC81024S	1000	735x 400 x 80	5.1	
2NC8 202 4S	2NC82024S	2000	1365x 400 x 80	9.6	

Low-temperature wall convectors Unique

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I



Wall convector with reduced surface temperature of approx. 60°C, to be mounted using a wall bracket with outlet for a fixed connection, electronic thermostat, lowering via control line or radio module, high-quality aluminium finned heating element, powder-surfaced casing. Colour: white. Similar to RAL 9010, On/Off switch.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
2NC8 062 4B	2NC80624B	600	915x 400 x 80	6.9	
2NC8 102 4B	2NC81024B	1000	1455x 400 x 80	11.1	

Unique wall convectors

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I



2NC8 082 4F

To be mounted using a wall bracket with outlet for fixed connection, electronic thermostat, lowering using control line or radio module, high-quality aluminium finned heating element, powder-coated casing, colour white similar to RAL 9010, On/Off switch.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
2NC8 062 4F	2NC80624F	600	555x 400 x 80	4.0	
2NC8 102 4F	2NC81024F	1000	735x 400 x 80	5.1	
2NC8 152 4F	2NC81524F	1500	1095x 400 x 80	7.8	
2NC8 202 4F	2NC82024F	2000	1365x 400 x 80	9.6	

Unique wall convectors

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I

without thermostat



2NC8 ... 4X

To be mounted using a wall bracket with outlet for fixed connection, without thermostat, high-quality aluminium finned heating element, powder-coated, colour white similar to RAL 9010, On/Off switch.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
2NC8 042 4X	2NC80424X	400	465x 400 x 80	3.4	

phaseout

Unique low profile panel convectors

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 21
Protection class I



To be mounted using a wall bracket with outlet for fixed connection, electronic thermostat, lowering using control line or radio module, high-quality aluminium finned heating element, powder-coated casing, colour white similar to RAL 9010, On/Off switch.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
2NC8 062 2F	2NC80622F	600	915x 200 x 80	3.8	
2NC8 102 2F	2NC81022F	1000	1275x 200 x 80	5.3	
2NC8 152 2F	2NC81522F	1500	1725x 200 x 80	7.0	

Radiant panel heaters

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 21

Protection class I



2NW5 ... 4F

Flat radiators with encapsulated tubular radiator for a uniform surface temperature and heat transfer as radiant heat, electronic room thermostat with temperature lowering using a control line or an optional radio module, controlling range 5 °C to 30 °C, antifreeze setting, wall bracket with outlet, connected with a fixed connection, ON / OFF switch, powder-coated casing, colour white, similar to RAL 9010.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
2NW5 042 4F	2NW50424F	400	780x 400 x 60	5.4	
2NW5 062 4F	2NW50624F	600	1060x 400 x 60	7.6	
2NW5 082 4F	2NW50824F	800	1400x 400 x 60	9.1	

Depth incl. wall clearance

Special accessories for direct heating devices

2NC8 ... series, 2NW5 ... series



2NC9812

Order reference	Art.-Nr.	Features	
2NC9812	2NC9812	Time control module for 2NC8... and 2NW5... devices with built-in thermostat for automatic temperature lowering of the Unique convectors. 15 fixed defined programs, 10 of which are for the living area and 5 for holiday homes	
2NC9813	2NC9813	Lowering module for devices of the 2NC8 and 2NW5 series with a built-in thermostat for manual temperature lowering.	
2NC9408	2NC9408	Slave module for controlling convectors without individual controller (2NC8...-4X). Master device with integrated room temperature controller required e.g.. 2NC8...-4S/-4F.	
2NC9810	2NC9810	Cover for the thermostat for devices 2NC8...series with room temperature controller	
2NC9811	2NC9811	Supporting feet for free-standing installation of low profile panel convectors of the 2NC8...-2 series (2 units)	

Radio control DigiHeat



2NC9860



2NC9825



2NC9839



2NC9840



Order reference	Art.-Nr.	Features	
2NC9860	2NC9860	Programmable zone regulation weekly program. Wireless remote control using a wireless signal. 6 zones can be controlled independently of one another. Weekly programming, shortest switching time 1h, where necessary comfort temperature and lowering temperature can be chosen independently of the program using a rotary encoder, holiday-mode.	
2NC9822	2NC9822	Digi Heat – wireless receiver for Unique convectors of the 2NC8 and 2NW5 series with thermostat.	
2NC9825	2NC9825	Digi Heat – wireless relay receiver for switching ON/OFF of electric consumers via a wireless signal, switching contact 16A, surface mounting, connection of the consumer via a plug.	
2NC9839	2NC9839	Digi Heat – wireless relay receiver for switching ON/OFF of electric consumers via a wireless signal, switching contact 16A, flush mounted design for fixed connection of the consumer	
2NC9840	2NC9840	DigiHeat wireless thermostat: Electronic thermostat with receiver for the control of electric under-floor heating, switching contact 16A, flush-mounting version for fixed connection of the consumer, including temperature sensor and/or floor temperature sensor	

Industrial fan heaters IHP series

Degree of protection IP 24

portable

Fan heaters in metal design with carrying handle for portable use. Controls integrated directly in the device, room temperature control with antifreeze setting, wall mounting using the accompanying wall bracket in not easily reachable heights possible. Casing colour blue, air outlet grid black.



IHP30

Order reference	Art.-Nr.	Rated power W	Type of plug	Number of fan levels	Air volume flow m ³ /h	Max. temperature increase K	Width x Height x Depth mm	Weight kg	
IHP30	348540	3000	Euro-plug	2	300	38	385x 390 x 260	6.1	
IHP50	348550	5000	CEE 6 A		450	58		7.4	

Industrial fan heaters CFH series

Connection voltage 3/N/PE ~400 V, 50 Hz

wall-mounted

Degree of protection IP 20
Protection class I

Robust metal/plastic design for wall mounting, wall bracket with universal turn and pivot options, controlled using an external wall mountable operating panel CFCH. Up to 7 CFH devices can be connected in series via control panel. The connections between the fan heater and the control panel as well as between the devices are established using a standard data cable type CAT 5 (not included in the scope of supply). Colour white, air outlet grid black.



CFH60

Order reference	Art.-Nr.	Rated power W	Air volume flow m ³ /h	Max. temperature increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg	
CFH60	351330	6000	900	39	60	386x 360 x 630	12.7	
CFH90	351340	9000	850	52			13.8	
CFH120	351350	12000		61				

Control panel CFCH is an essential accessory

Control panel CFCH for CFH industrial fan heater



CFCH

Order reference	Art.-Nr.	Features	
CFCH	351360	Digital control panel for CFH industrial fan heater, lit LC display, room temperature regulation from 5°C to 35°C, antifreeze feature, cold air level, up to 32 individually set programs, programming of a limited operating time of max. 5 hours, serial connection up to 7 CFH devices using a simple plug connection CAT 5, CAT 5 E, CAT 6 standard data cable (not supplied).	

Fan heater metal casing



HL185



HL185 T

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
HL185/2	335790	2000	OFF / Cold / 2000 W, radial blower, protection against overheating, indicator lamp, wall device, 2/PE ~ 400 V, fixed connection, colour anthracite.	230x 230 x 160	4.6	
HL185 T	335780		OFF / Cold / 2000 W, thermostat, radial blower, protection against overheating, indicator lamp, wall device, connection cable with plug, colour anthracite. 1/N/PE ~230 V, 50 Hz			
HL185/3	335960	700	OFF / Cold / 700 W, thermostat, radial blower, protection against overheating, indicator lamp, wall device, connection cable with plug, colour anthracite. 1/N/PE ~230 V, 50 Hz			

Air Curtains AC...N series

Connection voltage 1/N/PE ~230 V, 50 Hz

Electric operation

Degree of protection IP 20

Protection class I

Mounting above doors or on ceilings, adjustable air output direction, 2 heating levels, 1 cold air level. Controllable on the device itself or with a remote control (only AC 3RN) only. Door width covered adjustable from 600 mm (AC 3 and AC 45) to 900 mm (AC 6).



AC ... N

Order reference	Art.-Nr.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg	
AC 3 N	348220	3000	212	42	50	605x 214 x 135	5.1	
AC 45 N	348230	4500	248	53	52		5.2	
AC 6 N	348240	6000	446	40	57	905x 214 x 135	7.2	
AC 3 RN	348250	3000	212	42	50	605x 214 x 135	5.3	

Air barrier CAB series

Connection voltage 3/N/PE ~400 V, 50 Hz

Electric operation

Protection class I

Mounting above doors, ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, adjustable direction of flow, 2 heating levels, cold air level, 2 ventilation levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 10 devices at a time, optional door sensor switching. Essential accessories: CAB C5 controlsAccessories for combining up to 4 devices: connection set CAB M1 V2; Colour white, intake grid black



CAB 10 EV2

Order reference	Art.-Nr.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg	
CAB10EV2	117984	9000	1200	44	54	1057x 262 x 316	25	
CAB15EV2	117991	13500	1800		55	1557x 262 x 316	36	

Air barrier DAB series

Connection voltage 3/N/PE ~400 V, 50 Hz

Electric operation

Protection class I

Mounting above doors, ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, adjustable direction of flow, 2 heating levels, cold air level, 2 ventilation levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 10 devices at a time, optional door sensor switching. Essential accessories: CAB C5 controls. Accessories for combining up to 4 devices: connection set CAB M1 V2; Colour white, intake grid black



DAB 10 EV2

Order reference	Art.-Nr.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg	
DAB 10E V2	118004	12000	3000	23	58	1060x 360 x 390	39	
DAB 15E V2	118011	18000	4000	26	59	1560x 360 x 390	50	

Air barrier CAB series

Connection voltage 1/N/PE ~230 V, 50 Hz

hot water operation

Protection class I

DHW operation, mounting above doors, on ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, mounting height up to 2.7 m, adjustable direction of flow, 2 ventilator levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 10 devices at a time, optional door sensor switching. BEAB certification Essential accessories: CAB C 6 operator control; for combining several CAB M1 V2 devices. The connections between the operator panel and the hot-air curtains and between the devices are established using a standard data cable (type CAT 5 or higher) – data cable not included in the scope of supply! Colour white, intake grid black



CAB 10 W V2

Order reference	Art.-Nr.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg	
CAB10W V2	118028	8500	1100	23	53	1057x 262 x 316	25	
CAB15W V2	118035	12700	1700	22	54	1557x 262 x 316	36	

Rated output at 20 °C air intake temperature Rated output at 80 °C flow temperature and 60 °C return flow temperature

Air barrier DAB series

Connection voltage 1/N/PE ~230 V, 50 Hz

Protection class I

hot water operation



DAB 10 W V2

DHW operation, mounting above doors, on ceilings or hidden (optional installation kit needed), modular design allows simple placing of devices in a row, mounting height up to 4.0 m, adjustable direction of flow, 2 ventilator levels, controllable using wall-mounted low-voltage control or by connecting to a building management system. A separate control panel allows regulation of up to 10 devices at a time, optional door sensor switching. BEAB certification Essential accessories: CAB C 6 operator control; for combining several CAB M1 V2 devices. The connections between the operator panel and the hot-air curtains and between the devices are established using a standard data cable (type CAT 5 or higher) – data cable not included in the scope of supply!

Colour white, intake grid black

Order reference	Art.-Nr.	Rated power W	Air volume flow m ³ /h	Max. tempera- ture increase K	Sound pressure level in 3 m dB (A)	Width x Height x Depth mm	Weight kg	
DAB 10W V2	118042	13200	2500	15	57	1060x 360 x 390	39	
DAB 15W V2	118059	18100	3500		58	1560x 360 x 390	50	

Rated output at 20 °C air intake temperature Rated output at 80 °C flow temperature and 60 °C return flow temperature

Accessories for air barrier CAB-DAB series



CABC5

Order reference	Art.-Nr.	Features	
CABC5	117960	Wall-mounted controls for remote control of up to 10 DAB..E / CAB..E V2 hot-air curtains, ON/OFF switch, rotary switch for half/full ventilator output, heating output OFF/Half/Full, Manual/Automatic mode.	
CABC6	117977	Wall-mounted operator panel for remote control of up to 10 water-bearing CAB ..WV2 / DAB ..WV2 hot-air curtains. Rotary switch for setting the fan level and switch for automatic/manual operation switching.	
CABM1 V2	118103	Connection kit for electrical and mechanical connection of hot-air curtains of the CAB / DAB series.	
CAB KT 10	348830	Installation kit for hidden installation (e.g. false ceilings) for CAB 10 E / CAB 10 W	
CAB KT 15	348840	Installation kit for hidden installation (e.g. false ceilings) for CAB 15 E / CAB 15 W	
DAB KT 10	348850	Installation kit for hidden installation (e.g. false ceilings) for DAB 10 E / DAB 10 W	
DAB KT 15	348860	Installation kit for hidden installation (e.g. false ceilings) for DAB 15 E / DAB 15 W	

Handdryer



HD 701 AM



HD 601 AM



HD 501 AK



HD 201 AK

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
HD 701 AM	354760	2250	Robust metal casing with epoxy coating, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 470 m ³ /h with approx. 96 km/h, air outlet temperature approx. 53 °C, heat output 2000 W, motor power 250 W, fixed connection, protection class I, degree of protection IP 23, safety temperature limiter, VDE certification	276x 245 x 210	4.7	
HD 601 AM	354770	1640	Sheet-steel casing 1.9mm with epoxy coating, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 280 m ³ /h with approx. 65 km/h, air outlet temperature approx. 52 °C, heat output 1500 W, motor power 140 W, fixed connection, protection class II, degree of protection IP 21, safety temperature limiter, VDE certification	255x 302 x 140	4.5	
HD 501 AK	354780		Plastic casing made of 3 mm ABS, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 280 m ³ /h with approx. 65 km/h, air outlet temperature approx. 52 °C, heat output 1500 W, motor power 140 W, fixed connection, protection class II, degree of protection IP 21, safety temperature limiter, VDE certification	253x 302 x 153	3.0	
HD 201 AK	354790	1100	Compact dimensions and high dry output, plastic casing made of 3 mm ABS, colour white, similar to RAL 9010, infrared safety proximity switch with adjustable sensitivity, rated air flow 110 m ³ /h with approx. 85 km/h, air outlet temperature approx. 47 °C, heat output 950 W, motor power 150 W, fixed connection, protection class II, degree of protection IP 23, safety temperature limiter, VDE certification	145x 258 x 138	1.2	

phase out: HD 201 AK

Radiant panel heaters WW... series

Connection voltage 1/N ~230 V, 50 Hz

Degree of protection IP 24

Protection class II

Free-standing installation on casters, or wall-mounted. Metal heating plate, mech. thermostat, antifreeze, protection against over-heating, indicator lamp for heating operation, colour white, splash water protection, TÜV GS certification.

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
WW 100	AKO150611	1000	Performance levels: OFF / 0.65 / 1.0 kW	620x 560 x 250	6.7	
WW 150	AKO150615	1500	Performance levels: OFF / 1.0 / 1.5 kW	930x 560 x 250	9.5	
WW 200	AKO150620	2000	Performance levels: OFF / 1.3 / 2.0 kW	1170x 560 x 250	12.1	



WW 150



WW 200

Free-standing convectors

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 20

Protection class I

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
K811	358050	2000	Free-standing convector with freely adjustable thermostat, two performance levels, 1.0 and 2.0 kW, indicator lamp for heating operation, connection line approx. 1.0 m with plug, wall mounting possible using the accessories provided.	575x 418 x 200	4.1	
K821	358060		Free-standing convector with turbo blower and cold air level, freely adjustable thermostat, two performance levels, 1.0 and 2.0 kW, indicator lamp for heating operation, connection line approx. 1.0 m with plug, wall mounting possible using the accessories provided.			



K811



K821

Column radiators

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 20

Protection class I

Oil-free

Finned radiator with castors, oil-free design with shortened heat-up time, indicator lamp for heating operation, protection against overheating.

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
RD909 TS	352470	2000	9 fins, three control levels OFF / 1.4 / 2.0 kW, colour silver grey/anthracite.	515x 620 x 245	8.7	
RD911 TS	352480	2500	11 fins, three control levels OFF / 1.7 / 2.0 kW, colour silver grey / anthracite	610x 620 x 245	10.6	



RD909 TS



RD911 TS

Infrared heater (compact range)

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 24

Protection class I

Infrared heaters (compact range) with quartz heating elements for horizontal wall mounting, switchable via a pull switch on the device, pivoting angle 0° – 40°, fixed connection, VDE certification.

Order reference	Art.-Nr.	Rated power W	Number of heating elements	Features	Width x Height x Depth mm	Weight kg	
BS 1201 S	356650	1200	2	Three control levels OFF / 0.6 / 1.2 kW, colour silver.	526x 140 x 92	1.6	
BS 1801 S	356640	1800	3	Four control levels OFF / 0.6 / 1.2 / 1.8 kW, colour silver.		1.7	
BS1801 W	356630			Four control levels OFF / 0.6 / 1.2 / 1.8 kW, colour white.			



BS1801 W

Infrared heaters (low profile range)

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 24

Protection class I

Infrared heaters (low profile range) with quartz heating elements for horizontal installation, switchable via a cord switch on the device, pivoting angle 0° – 40°, fixed connection, VDE certification.

Order reference	Art.-Nr.	Rated power W	Number of heating elements	Features	Width x Height x Depth mm	Weight kg	
BK 1201 S	356670	1200	1	Two control levels OFF / 1.2 kW, colour silver.	768x 100 x 92	1.6	
BK 2001 S	356660	2000	2	Four control levels OFF / 0.8 / 1.2 / 2.0 kW, colour silver.		1.7	



BK 2001 S

Infrared heater for changing table

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 24

Protection class I

Order reference	Art.-Nr.	Rated power W	Number of heating elements	Features	Width x Height x Depth mm	Weight kg	
BY 801 S	356680	500	1	Infrared changing table heater for horizontal wall mounting, connection cable with plug, 1 safety quartz radiator bar, pivoting angle 0°- 40°, two control levels OFF / 0.5 kW, colour silver, VDE certification, controllable via the pull switch on the device.	768x 100 x 92	1.8	



BY 801 S

Patio radiators

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP X4

Protection class I

UWS 75 RD 1/E



BA1200



BA1900



Order reference	Art.-Nr.	Rated power W	Number of heating elements	features	Width x Height x Depth mm	Weight kg	
UWS 75 RD 1/E	AKO106169	1300	2	Patio radiator for horizontal wall or ceiling mounting, fixed connection, pivoting angle (one-sided) 25°, 3 control levels OFF / 0.65 / 1.3 kW, switching via an external switch (e.g. series switch), stainless steel design, VDE certification. Can also be connected to 3/N/PE 400V AC, 50 Hz when several UWS heaters are being used.	750x 105 x 100	1.8	
BA1200	354870	1200		Infrared heater with two quartz heating elements, robust aluminium casing, protective grid, for horizontal wall mounting, fixed connection, connection cable 1.5 m, 2 quartz radiator bars, 2 control levels OFF / 1.2 kW can be switched externally (without internal pull switch).	594x 160 x 144	3.2	
BA1900	354880	1900	1	Halogen infrared heater with a HeLeN infrared heating element for short heat-up time, long service life, high heat output and minimal glare, robust aluminium casing incl. protective grid, for horizontal wall mounting, fixed connection, connection cable 1.5 m, 1 heating element, two control levels OFF / 1.9 kW, can be switched externally (without internal pull switch).		3.1	

Industrial infrared heaters

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 20

Protection class I

RW 120/1



Infrared heater for larger areas for horizontal or vertical wall or ceiling mounting, connection cable with connector, pivoting angle (single-sided) 60°, two performance levels OFF / 2.0 kW, colour silver/grey.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
RW 120/1	AKO101945	2000	1200x 155 x 175	4.3	

Bathroom fan heater

Connection voltage 1/N/PE ~230 V, 50 Hz

Degree of protection IP 24

Protection class I

Rapid heater for bathrooms with metal casing for wall mounting, thermostat, protection against overheating, frost protection.

H260/4



Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
H260/4	356700	2000	300x 405 x 120	3.2	

Design fan heaters

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 20
Protection class II



H401 TSD



H400 TS

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
H401 TSD	352580	2000	with illuminated display, desired temperature can be selected via touch control within the temperature range of +5 °C to +35 °C, desired temperature and room temperature displayed, antifreeze setting, cold air level, two heating levels 1.2 / 2.0 kW, connection cable with mains plug, colour: silver / anthracite	235x 328 x 175	1.4	
H400 TS	352570		with infinitely variable thermostat incl. antifreeze (approx. 5 °C), five levels OFF / Cold / 0.8 / 1.2 / 2.0 kW, overtemperature protection, indicator lamp for heating operation, connection cable with mains plug, colour: silver / anthracite			

Fan heater

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 21
Protection class II



SH302 TLU

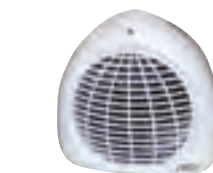


SH301 TLS

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
SH302 TLU	AKO151156	2000	Wall-mounted or floor-mounted fan heater with axial fans, carrying handle/recess, cable compartment, 24-hour timer, thermostat, antifreeze, cold air level, indicator lamp, five levels OFF/ Cold / 0.8 / 1.2 / 2.0 kW, colour blue-grey	240x 340 x 185	1.8	
SH301 TLS	AKO151151		Wall-mounted or floor-mounted fan heater with axial fans, carrying handle/recess, cable compartment, thermostat, antifreeze, cold air level, indicator lamp, five levels OFF/ Cold / 0.8 / 1.2 / 2.0 kW, colour blue-grey.		1.7	
SH300 T	AKO151146		Wall-mounted or floor-mounted fan heater with axial fans, carrying handle/recess, cable compartment, thermostat, antifreeze, colour blue-grey.			

Fan heater

Connection voltage 1/N ~230 V, 50 Hz
Degree of protection IP 20
Protection class II



H380 TLS

Free-standing fan heater, thermostat, antifreeze, protection against overheating, indicator lamp, cold air level, four levels OFF / Cold / 1.0 / 2.0 kW, colour light grey/silver grey.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
H380 TLS	AKO03802500	2000	244x 250 x 155	1.4	

Frost protection convector

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 20
Protection class I



FW 550 S

Frost protection convector for wall mounting, freely adjustable temperature regulation, frost protection, protection against overheating, indicator lamp for heating operation, colour white, BEAB certification. Switch-on temperature in frost protection setting approx. +10 °C.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
FW 550 S	356710	600	260x 242 x 121	1.2	

AKO cooking plate

Connection voltage 1/N/PE ~230 V, 50 Hz
Protection class I



KP515



KP525

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
KP515	AKO301038	1500	Single hotplate, diameter 18 cm, indicator lamp, plate output 1.5 kW, infinitely variable temperature control, overflow rim, enamelled white.	260x 68 x 300	3.0	
KP525	AKO301048	2500	Double hotplate, diameter 18 cm output 1.5 kW and diameter 14.5 cm output 1.0 kW, indicator lamp, infinitely variable temperature control, overflow rim, enamelled white.	480x 68 x 300	4.2	

Under tile heating mats HM...TS

Connection voltage 1/N/PE ~230 V, 50 Hz

with single-sided, sleeveless connection, self-adhesive



HM... TS

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and/or DIN 17471 with teflon insulation, surface-related consumption 150 W/m², heating pipe diameter approx. 4 mm, attached to plastic fabric with one-sided cooling pipe 4 m to simplify installation, installation width 0.5 m, VDE certification according to EN 60335-2-96

Order reference	Art.-Nr.	Rated power W	Surface-related consumption W/m ²	Width m	length m	Surface area m ²	
HM 150 TS 150-5	351080	150W	150W/m ²	0.5m	2m	1.0m ²	
HM 225 TS 150-5	343800	225W			3m	1.5m ²	
HM 300 TS 150-5	343810	300W			4m	2.0m ²	
HM 450 TS 150-5	343820	450W			6m	3.0m ²	
HM 600 TS 150-5	343830	600W			8m	4.0m ²	
HM 750 TS 150-5	343840	750W			10m	5.0m ²	
HM 900 TS 150-5	343850	900W			12m	6.0m ²	

Heater mat installation width, comprises of the heater mat width and the installation clearance. Heater mat can be installed variably on site. Heated area, comprises of the heater mat width and the installation clearance.

Under tile heating mats set HM...TS set BTU

Connection voltage 1/N/PE ~230 V, 50 Hz

with floor temperature controller BTU 401 UN



HM ... TS Set BTU

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and DIN 17471 with teflon insulation, surface-related consumption 150 W/m², heating pipe diameter approx. 4 mm, attached to plastic fabric with one-sided cooling pipe 4 m to simplify installation, installation width 0.5 m, VDE certification according to EN 60335-2-96 with

electronic floor temperature controller BTU 401 UN

Electronic floor temperature controller with digital weekly timer for underfloor heating systems in flat switch mounting frame for flush mounting; floor temperature sensor (standard NTC sensor, 4 m connection cable length, sensor element Ø 7 x 28 mm); can be installed in virtually all flat switch programmes using an adapter element (50 x 50 mm according to DIN 49075) of the flat switch programme manufacturer, switching capacity 230 V AC / 16 (2) A (NO contact), controlling range 10°C to 50°C, LC display indicating status and operating mode, temperature setting in 0.5 K increments, 3 time programs (1, 2 or 3 heating period intervals), individual allocation of weekday and time program, 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer program), programmable temperature range limitation, sensor monitoring, colour alpine white, IP 30, dimensions in mm (W x H x D) 81.5 x 81.5 x 44.5 (height 16 mm mounted in flush-mounted box)

Order reference	Art.-Nr.	Rated power W	Surface-related consumption W/m ²	Width m	length m	Surface area m ²	
HM 150 TS Set BTU	351070	150W	150W/m ²	0.5m	2m	1.0m ²	
HM 225 TS Set BTU	350900	225W			3m	1.5m ²	
HM 300 TS Set BTU	350910	300W			4m	2.0m ²	
HM 450 TS Set BTU	350920	450W			6m	3.0m ²	
HM 600 TS Set BTU	350930	600W			8m	4.0m ²	
HM 750 TS Set BTU	350940	750W			10m	5.0m ²	
HM 900 TS Set BTU	350950	900W			12m	6.0m ²	

Heater mat installation width, comprises of the heater mat width and the installation clearance. Heater mat can be installed variably on site. Heated area, comprises of the heater mat width and the installation clearance.

Under tile mats set HM...TS set BT

Connection voltage 1/N/PE ~230 V, 50 Hz

with floor temperature controller BT 401 UN



HM ... TS Set BT

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and/or DIN 17471 with teflon insulation, surface-related consumption 150 W/m², heating pipe diameter approx. 4 mm, attached to plastic fabric with one-sided cooling pipe 4 m to simplify installation, installation width 0.5 m, VDE certification according to EN 60335-2-96 with Electronic floor temperature controller **BT 401 UN** operating voltage: 230 V, 50 Hz; switching capacity: 16 (2) A at 230 V (NO contact); controlling range 10°C to 50°C; standard NTC sensor, 4 m cable length, sensor element Ø 7 x 28 mm with flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, thermostat dial, temperature range limitation integrated in the casing cover, ON/OFF program switch, LED display for heating and temperature lowering, temperature lowering by remote control (approx. 5 K), sensor monitoring, colour alpine white, IP 30, dimensions in mm(W x H x D) 81.5 x 81.5 x 42.5 (height 16 mm mounted in flush box).

Order reference	Art.-Nr.	Rated power W	Surface-related consumption W/m ²	Width m	length m	Surface area m ²	
HM 150 TS Set BT	351060	150W	150W/m ²	0.5m	2m	1.0m ²	
HM 225 TS Set BT	350840	225W			3m	1.5m ²	
HM 300 TS Set BT	350850	300W			4m	2.0m ²	
HM 450 TS Set BT	350860	450W			6m	3.0m ²	
HM 600 TS Set BT	350870	600W			8m	4.0m ²	
HM 750 TS Set BT	350880	750W			10m	5.0m ²	
HM 900 TS Set BT	350890	900W			12m	6.0m ²	

Heater mat installation width, comprises of the heater mat width and the installation clearance. Heater mat can be installed variably on site. Heated area, comprises of the heater mat width and the installation clearance.

Installation accessories for HM...TS



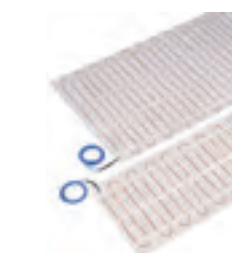
KEDTS Set

Order reference	Art.-Nr.	Features	
KEDTS Set	344010	Cooling pipe extension for the TS heater mats with protective earthing connection, 1.0 mm ² , length 10 m, 10 connection sleeves. Only required when the 4 m long cooling pipes connected to the mats via sleeves are not long enough.	
NHD100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.	

Under tile heating mats HM ... SF

Connection voltage 1/N/PE ~230 V, 50 Hz

to be installed directly in the tile adhesive or the levelling



HM ... SF ...

Ready for installation and connection, heating pipe with protective jacket for connecting to the fault current protective switch, heating pipe made of resistance alloy according to DIN 17470 and/or DIN 17471 with teflon insulation, surface-related consumption 150 W/m², additional installation height ca. 5 – 8 mm, heating pipe diameter approx. 2.9 mm, attached to plastic fabric with two cooling pipes of 4 m each, installation width 0.9 m, VDE certification.

Order reference	Art.-Nr.	Rated power W	Surface-related consumption W/m ²	Width m	length m	Surface area m ²	
HM 150 SF 150-5	335580	150W	150W/m ²	0.5m	2m	1.0m ²	
HM 300 SF 150-5	336280	300W			4m	2.0m ²	
HM 450 SF 150-5	336300	450W			6m	3.0m ²	
HM 180 SF 150	326140	180W		0.9m	1.3m	1.2m ²	
HM 410 SF 150	330260	410W			3.1m	2.7m ²	
HM 1130 SF 150	326170	1130W			8.5m	7.5m ²	

Heater mat installation width, comprises of the heater mat width and the installation clearance. Heater mat can be installed variably on site. Heated area, comprises of the heater mat width and the installation clearance. phase out

Installation accessories for HM ... SF



KED SF Set

Order reference	Art.-Nr.	Features	
NHD100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.	
KED SF Set	336560	Cooling pipe extension for heater mat system HM ... SF with protective jacket, 1.0 mm ² , 10 m long blue, 10 m black, 10 connection sleeves.	
KED 1010 SF	329850	Cooling ends extension for HM ... SF, with protective jacket, 1.0 mm ² , length 10 m, black	

phase out: KED SF Set, KED 1010 SF

Floor heating mats HM ... R for installation in or under concrete

Connection voltage 1/N ~230 V, 50 Hz



HM ... R ...

For use as underfloor direct heating, underfloor storage heating or edge zone direct heating with PVC outer surface, manufactured ready for mounting, fixed to a carrier netting for installation in/under the screed, heating pipe diameter approx. 7 mm. including waterproof sleeves and colour-coded cooling pipes 4m per side, heating pipe design: NH2GMY-90 according to VDE 0253/12. 9 for use in dry rooms and under or in the screed, VDE certification.

Order reference	Art.-Nr.	Rated power W	Surface-related consumption W/m2	Width m	length m	Surface area m2	
HM 21 R 100	326840	180W	100W/m2	0.9m	2.0m	1.8m2	
HM 31 R 100	320640	310W			3.4m	3.1m2	
HM 51 R 100	320650	510W			5.7m	5.1m2	
HM 100 R 100	320660	1080W			12 m	10.8m2	
HM 170 R 100	320670	1780W			19.6m	17.6m2	
HM 21 R 120	326830	194W	120W/m2		1.8m	1.6m2	
HM 33 R 120	320680	346W			3.2m	2.9m2	
HM 56 R 120	320690	583W			5.4m	4.9m2	
HM 110 R 120	320700	1156W			10.7m	9.6m2	
HM 180 R 120	320710	1922W			17.8m	16m2	
HM 21 R 140	326820	214W	140W/m2		1.7m	1.5m2	
HM 36 R 140	319260	365W			2.9m	2.6m2	
HM 60 R 140	319270	630W			5.0m	4.5m2	
HM 120 R 140	319280	1260W			10.0m	9.0m2	
HM 200 R 140	319290	2079W			16.5m	14.9m2	
HM 21 R 160	327230	216W	160W/m2		1.5m	1.4m2	
HM 36 R 160	327240	390W			2.7m	2.4m2	
HM 60 R 160	327250	662W			4.6m	4.1m2	
HM 120 R 160	327260	1310W			9.1m	8.2m2	
HM 200 R 160	327270	2088W			14.5m	13.1m2	
HM 21 R 180	326790	243W	180W/m2		1.5m	1.4m2	
HM 35 R 180	326670	356W			2.2m	2.0m2	
HM 57 R 180	326680	616W			3.8m	3.4m2	
HM 120 R 180	326690	1215W			7.5m	6.8m2	
HM 195 R 180	326700	1976W			12.2m	11.0m2	
HM 21 R 205	326780	258W	205W/m2		1.4m	1.3m2	
HM 36 R 205	319420	387W			2.1m	1.9m2	
HM 60 R 205	319430	572W			3.1m	2.8m2	

Heater mat installation width, comprises of the heater mat width and the installation clearance. Heater mat can be installed variably on site.

Heated area, comprises of the heater mat width and the installation clearance 205 W/m² and 240W/m² only as edge zone heating for installation in the screed.

phase out: HM ... R 205

Installation accessories for HM ... R



KEB 1525 R



VRB 10 R

Order reference	Art.-Nr.	Features	
KEB 1525 R	329810	Cooling pipe extension for heater mat system HM ... R, 1.5 mm ² , length 25 m, colour blue.	
KES 1525 R	329820	Cooling pipe extension for heater mat system HM ... R, 1.5 mm ² , length 25 m, colour black.	
VRB 10 R	339670	10 Connection sleeve set for cooling pipe extension.	
NHD100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.	

Floor heating mat HM...RS for installation in or under

Connection voltage 1/N/PE ~230 V, 50 Hz

concrete



HM ... RS ...

For use as underfloor direct heating, underfloor storage heating or edge zone direct heating with protective jacket and PVC outer surface, manufactured ready for mounting, fixed to a carrier netting for installation in/under the screed, including waterproof sleeves and colour-coded cooling pipes 4m per side, heating pipe design: NH2GYQY-90 according to VDE 0253 for use in dry rooms, damp and wet rooms, heating pipe diameter approx. 9 mm, VDE certification.

Order reference	Art.-Nr.	Rated power W	Surface-related consumption W/m2	Width m	length m	Surface area m2	
HM 21 RS 140	326890	214W	140W/m2	0.9m	1.7m	1.5m2	
HM 36 RS 140	320800	365W			2.9m	2.6m2	
HM 21 RS 160	327280	216W	160W/m2		1.5m	1.4m2	
HM 36 RS 160	327290	389W			2.7m	2.4m2	
HM 60 RS 160	327300	662W			4.6m	4.1m2	
HM 120 RS 160	327310	1310W			9.1m	8.2m2	
HM 200 RS 160	327320	2088W	180W/m2		14.5m	13.1m2	
HM 21 RS 180	326860	243W			1.5m	1.4m2	
HM 35 RS 180	326710	356W			2.2m	2.0m2	
HM 57 RS 180	326720	616W			3.8m	3.4m2	
HM 120 RS 180	326730	1215W	205W/m2		7.5m	6.8m2	
HM 195 RS 180	326740	1976W			12.2m	11.0m2	
HM 21 RS 205	326850	258W			1.4m	1.3m2	
HM 36 RS 205	320960	387W			2.1m	1.9m2	
HM 60 RS 205	320970	572W	240W/m2		3.1m	2.8m2	
HM 120 RS 205	320980	1292W			7.0m	6.3m2	
HM 200 RS 205	320990	1974W			10.7m	9.6m2	
HM 21 RS 240	319500	238W			1.1m	1.0m2	
HM 39 RS 240	319510	410W	240W/m2		1.9m	1.7m2	
HM 65 RS 240	319520	670W			3.1m	2.8m2	
HM 133 RS 240	319530	1318W			6.1m	5.5m2	

Heater mat installation width, comprises of the heater mat width and the installation clearance. Heater mat can be installed variably on site. Heated area, comprises of the heater mat width and the installation clearance 205 W/m² and 240W/m² only as edge zone heating for installation in the screed.

phase out: HM ... RS 140

Installation accessories for HM ... RS



KES 1525 RS



VRB 10 RS

Order reference	Art.-Nr.	Features	
KES 1525 RS	329830	Cooling pipe extension for heater mat system HM ... RS, with protective jacket, 1.5 mm ² , length 25 m, colour black	
KEB 1525 RS	330270	Cooling pipe extension for heater mat system HM ... RS, with protective jacket, 1.5 mm ² , length 25 m, colour blue.	
VRB 10 RS	339680	Connection kit for heater mat system HM ... RS, 10 connecting sleeve set for extending the cooling pipe.	
NHD100	319620	Special retaining dowels for fixing the heater mats to a surface, 100 pieces, length approx. 25 mm.	

Self-regulating electric band heaters – per metre

Connection voltage 1/N/PE ~230 V, 50 Hz



HBS...

Gutter heater or pipe trace heater made of self-limiting electric band heater, used for frost protection on (vertical) pipes, in gutters or on roof surfaces. Made of two parallel tin-plated stranded copper wires and an intermediate heating element, protective jacket of tin-plated copper, polyolefin outer surface, VDE certification. Different heat output and operating range, depending on the design. Supplied in lengths from 15 m.

Order reference	Art.-Nr.	Heatoutput band heater at 10°C W	Applicationband heater	Colour	Width x Height mm	
HBS10	336060	10	pipe heating cable	blue	12x 5.8	
HBS25	336070	25		green		
HBS 15 UV	336080	15	roof gutter heating cable	black		

Additional delivery of 10% of the ordered quantity is possible. The actual delivered quantity will be charged.

Self-regulating electric band heaters

Connection voltage 1/N/PE ~230 V, 50 Hz



HBS...

Gutter heater or pipe trace heater made of self-limiting electric band heater, used for frost protection on (vertical) pipes, in gutters or on roof surfaces. Made of two parallel tin-plated stranded copper wires and an intermediate heating element, protective jacket of tin-plated copper, polyolefin outer surface, VDE certification. Different heat output and operating range, depending on the design. Supplied in a 300 m cardboard roll.

Order reference	Art.-Nr.	Heatoutput band heater at 10°C W	Applicationband heater	Colour	Width x Height mm	
HBS10-300	336090	10	pipe heating cable	blue	12x 5.8	
HBS25-300	336100	25		green		
HBS 15 UV-300	336110	15	roof gutter heating cable	black		

Connecting equipment for HBS



SMSF

Order reference	Art.-Nr.	Features	
SMS	314520	Shrink tubing connection kit for mounting on polyester casings, including M20 pipe unions and termination for HBS electric band heaters.	
SMSF	332090	Shrink tubing connection kit for mounting on polyester casings, with a clamping block for connecting flexible cooling pipes and electric band heaters including termination for HBS electric band heaters.	
VMS	316380	Connecting sleeve set with connecting block for connecting two electric band heaters.	

Installation accessories electric band heaters



MB



HKB50

Order reference	Art.-Nr.	Features	
MB	316340	Mounting plate made of stainless steel incl. cable ties, for use as a spacer, edge protection, roof holder etc. (packaging unit 5).	
GKB4657-12	316310	Adhesive fabric tape for long-term fixing of electric band heaters. Length 50 m, 12 mm wide.	
HKB50	316330	Marking labels self-adhesive, inscription: "Electrically heated" to be attached to the pipe insulation (packaging unit 50). Attachment regulations Dimensions (WxH) 170 x 70 mm	

phase out: GKB 4657-12

Control and regulation devices for electric band heaters and exterior surface heating

Electronic ice and snow detector



EM1773



EF3354

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
EM1773	361710	Digital ice and snow detectors for use in combination with one or two combined humidity and temperature sensors (type EF 3354 / EF 3351) for gutters, flat roofs and parabolic aerials. Temperature and humidity measurement; humidity sensitivity, minimum heating time, lower and upper switch-on temperature adjustable for each connected sensor, integration into distribution board (6 modular spacings on 35 mm top hat rail according to DIN EN 60715), switching contact heating 250 V AC / 6 (2) A. LED displays the current operating status.	107x 88 x 60	
EF3354	361720	Ice sensor made of brass for gutters, flat roofs and parabolic aerials for use in combination with EM 1773 digital ice and snow detector, maintenance-free, without any exposed metal electrodes for detecting humidity, degree of protection IP 68, 6 m long connecting lead (type SL-Y11Y, extendable up to 50 m, min. 4 x 0.8 mm ²), dimensions (L x Ø) 96 x 20 mm.		

Electronic temperature controller



ETR 060 N



BT 060 AN

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
ETR 060 N	328830	Electronic temperature controller with remote sensor, controlling range 0 °C to 60 °C, mounting on top hat rail e.g. installation in terminal block, space required for 2 modular spaces, incl. standard NTC sensor, sensor connection cable length 4 m, sensor element diameter approx. 8 mm; switching contact 230 V / 10 (3) A (NO contact), 230 V / 5 (1.5) A (NC contact).	36x 86 x 60	
BT 060 AN	332080	Electronic temperature controller with remote sensor, controlling range 0 °C to 60 °C, IP 65, incl. standard NTC sensor, sensor connection cable length 4m, diameter sensor element approx. 8 mm, switching contact 230 V / 16 A (changeover contact), surface mounting, degree of protection IP65.	96x 169 x 56	

phase out: BT 060 AN

Electromechanical temperature controller



RTA 1515-2



RTA 2030

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RTA 1515-2	319220	Electromechanical controller for gutter heating, bimetal controller with two separately adjustable thermostats (1 NC contact, 1 NO contact), 230 V / 16 (4) A, controlling range -20 °C to +25 °C, IP 65.	122x 120 x 55	
RTA 2030	319210	Electromechanical frost protection convector for outdoors or rooms subject to dampness. Bimetal controller with thermal feedback. Viewer for indoor adjustment, changeover switching contact, switching capacity: heating 230 V AC / 16 (4) A, cooling 230 V AC / 5 (2) A, controlling range -20 °C to +35 °C, IP 65, for use as antifreeze protection of a pipe (external temperature).		

Pipe-mounted temperature controller



RAR20-90

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RAR20-90	316360	Pipe trace heater with outdoor regulation (bimetal), controlling ranges 20 °C to 90 °C changeover switching contact, 230 V, 15 (2.5) A, delivery includes tightening strap, degree of protection IP 20.	50x 110 x 59	

Universal DC charge control with timer function

Control voltage 1 0.91 to 1.43 V

Control voltage 2 -3,6 to -2,85 V

Dimplex PROTOMATIK®



ZW05DCU

Universal DC microprocessor-driven charge control with timer function for backward, intermediate and forward control, two control voltage outputs 0.91 to 1.43 V DC and -3.6 to -2.85 V DC, back-lit multi-function display, 4-key operation with direct selector switch, service function, external temperature averaging, direct control via charge control line, automatic PTC external sensor recognition (old Bauknecht external sensor), time-controlled safety output for enable and additional enable timer, adjustable charge enable detection, initial heating program for screed flooring, characteristic curve switching for lower operation external or via integrated real-time clock (weekly program and absence of up to 30 days), synchronised charging using a real-time clock possible, integrated error detection, power reserve for voltage interruption of up to 6 h, top hat rail mounting – 6 modular spaces, degree of protection IP 20 if installed accordingly, lead-sealable connection terminal covers as a standard, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), direct voltage 0.91 to 1.43 V and -3.6 to -2.85 V.

For storage heating systems and electric underfloor storage heaters with DC charge control.

Order reference	Art.-Nr.	Width x Height x Depth mm	
ZW05DCU	348290	105x 83 x 61	

DC charge control

Control voltage 1 0.91 to 1.43 V

Dimplex PROTOMATIK®



WG05DC

For storage heaters with electronic DC charge controller. Without timer for forward control, control voltage system 0.91 to 1.43 V DC, adjustable base charge, characteristic curve switching for external lower operation, integrated error detection, top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), direct voltage 0.91 to 1.43 V.

Order reference	Art.-Nr.	Width x Height x Depth mm	
WG05DC	348300	54x 83 x 61	

DC group control unit

Control voltage 1 0.91 to 1.43 V

Dimplex PROTOMATIK®



GR05DC

For storage heaters with electronic DC charge controller. "Domestic station" for individual control of groups of heaters in combination with a DC central control unit, adjuster for raising or lowering the charge, characteristic curve switching for external lowering operation; charge level in lowering operation (0 – 100%) adjustable, reference variable 0.91 to 1.43 V DC, top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly, 0.91 to 1.43 V DC.

Order reference	Art.-Nr.	Width x Height x Depth mm	
GR05DC	348310	54x 83 x 61	

Universal DC charge controller

Control voltage 1 0.91 to 1.43 V

Control voltage 2 -3,6 to -2,85 V

Dimplex PROTOMATIK®



AR 05DCU 2



AR 05DCU 4

For storage heating systems and electric underfloor storage heaters with DC charge control. Back-lit multi-function display, 4-key operation, error detection, individual heating circuits can be shut off; switching capacity max. 3A / 230 V~, reference variable 0.91 to 1.43 V or -3.6 to -2.85 V DC, adjustable heating curve (extendable temperature setting range 30°C to 90°C for residual heat and external temperature-dependent loading of the storage heating system), individual raising / lowering of day-time and night-time charging, sensor type switchable between standard NTC temperature sensor; (2.43 kOhm/20°C) and NTC sensor type 30 (500 Ohm/20°C), top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly. (Note: NTC temperature sensors are not included in the scope of supply), for 0.91 to 1.43 V and -3.6 to -2.85 V DC.

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
AR 05DCU 2	348350	Max. of two control circuits can be connected	54x 83 x 61	
AR 05DCU 4	348370	Max. of four control circuits can be connected		

AC charge control with timer function

Control voltage 1 ~230 V
Operating time system 37 % – 80 % adjustable

Dimplex PROTOMATIK®



ZWM05AC

For storage heaters with thermomechanical AC charge controller and duo-electronic storage heaters. AC-microprocessor-driven charge control with timer function for backward, intermediate and forward control, control signal 230 V~ AC, control system adjustable from 80 % to 100% up to 37 % operating time system, back-lit multi-function display, 4-key operation with direct selector switch, service function, external temperature averaging, direct control via charge control line, automatic PTC external sensor recognition (old Bauknecht exterior sensor), time-controlled safety output for enable and additional enable time 6 A / 230 V~, max. output control rating (Z1/Z2) 300 W, characteristic curve switching for lower operation external or using an integrated real-time timer (weekly program and absence of up to 30 days), synchronised charging using a real-time clock possible, integrated error detection, power reserve for voltage interruption of up to 6 h, top hat rail mounting – 6 modular spaces, degree of protection IP 20 if installed accordingly, lead-sealable connection terminal covers as standard, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), alternating voltage 230 V~, 37 % – 100 % operating time system.

Order reference	Art.-Nr.	Width x Height x Depth mm	
ZWM05AC	348320	105x 83 x 61	

AC charge control

Control voltage 1 ~230 V
Operating time system 37 % – 80 % adjustable

Dimplex PROTOMATIK®



WGM05AC

For storage heaters with thermomechanical AC charge controller and duo-electronic storage heaters. AC central control unit without timer for forward control, control signal 230 V~ AC, control system adjustable from 80 % to 68/72 % or 40/37 % operating time system, adjustable base charge, characteristic curve switching for external lower operation, integrated error detection, max. output control rating (Z1/Z2) 300 W, top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly, standard NTC external sensor included in the scope of supply (connection cable 2 m; extendable up to a maximum of 30 m; IP54), alternating voltage 230 V~, 80 % or 37 %/40 % or 68 %/72 % operating time system.

Order reference	Art.-Nr.	Width x Height x Depth mm	
WGM05AC	348330	54x 83 x 61	

AC group control unit

Control voltage 1 ~230 V
Operating time system 37 % – 80 % adjustable

Dimplex PROTOMATIK®



GRM05AC

For storage heaters with thermomechanical AC charge controller and duo-electronic storage heaters. "Domestic station" for individual control of groups of heaters in combination with a AC central control unit, reference variable control signal 230 V AC/% operating time; operating time system converter function (operating time control system of the ingoing and outgoing signals can be coded as 80 %, 72/68 % or 40/37 % operating time system), adjuster for raising or lowering the charge, characteristic curve switching for external lowering operation; charge level in lowering operation (0 – 100%); max. output control rating (A1/A2) 300 W, top hat rail mounting – 3 modular spaces, degree of protection IP 20 if installed accordingly, 230 V~ AC, 80 %, 72/68 % or 40/37 % operating time system.

Order reference	Art.-Nr.	Width x Height x Depth mm	
GRM05AC	348340	54x 83 x 61	

Temperature sensor



FG3115

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
FG3115	336620	Norm NTC-2 temperature sensor (2.43 kOhm/20 °C) according to DIN 44574 with weather proof casing for surface mounting, terminal connection.	55x 94.3 x 37	

Room temperature controller



Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RT 200	355480	Electromechanical temperature controller (bimetal) with thermal feedback, switching capacity 230 V / 2 (1) A, IP 30, controlling range 5 °C to 30 °C, temperature lowering at night by remote control (approx. 4 K), extremely thin casing, colour alpine white, temperature range limitation in the casing cover, surface mounting.	78x 78.5 x 14	
RT 201	355490	Electromechanical temperature controller (bimetal) with thermal feedback, switching capacity 230 V / 2 (1) A, IP 30, controlling range 5 °C to 30 °C, temperature lowering at night by remote control (approx. 4 K), extremely thin casing, colour alpine white, temperature range limitation in the casing cover, surface mounting, with ON/OFF switch and heating mode indicator lamp.		
RT 202	355500	Electromechanical temperature controller (bimetal) with thermal feedback, switching capacity 230 V / 10 (4) A, IP 30, controlling range 5 °C to 30 °C, colour alpine white, temperature range limitation in the casing cover, surface mounting, with 2 switches (ON/OFF, supplementary heating) and 2 indicator lamps (ON/OFF, supplementary heating).	78x 83.4 x 23	
RTS 207	355520	Electromechanical temperature controller (bimetal) with thermal feedback, switching capacity 230 V / 10 (4) A, IP 30, controlling range 5 °C to 30 °C, temperature lowering at night by remote control (approx. 4 K), colour alpine white, temperature range limitation in the casing cover, surface mounting. With closed casing cover (temperature adjuster covered, for use in schools).	78x 83.4 x 26	

Room temperature controller in flat switch mounting frame for flush mounting



Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RT 200 U	355560	Electromechanical temperature controller (bimetal) with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 10 (4) A, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white.	81x 85 x 16	
RT 201 U	355570	Electromechanical temperature controller (bimetal) with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 10 (4) A, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white. With ON/OFF switch, LED display mode.		
RT 202 U	355580	Electromechanical (bimetal) temperature controller with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 10 (4) A, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white. Switching output supplementary heating and ON/OFF switch for supplementary heating, LED display supplementary heating mode.		
RT 204 U	355590	Electromechanical (bimetal) temperature controller with thermal feedback, flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 250 V AC / 13 (4) A, max. 3000W, controlling range 5 °C to 30 °C, thermostat dial, temperature range limitation in the casing cover, temperature lowering by remote control (approx. 4 K), colour alpine white.		

Room temperature controller with plug



RT 104 ST

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RT 104 ST	348180	Plug thermostat (bimetal) suitable for plugging into a socket, controlling range 5 °C to 30 °C, temperature range limitation in the casing cover, switching capacity 250V AC / 13 (4) A, max. 3000 W, colour: alpine white	74x 74 x 83	

Depth including plug

Room temperature controller with changeover switching contact



RTi 210

Electromechanical temperature controller with thermal feedback, possible applications heating: storage heaters, WW actuators, possible applications cooling: air conditioners, ventilation units, voltage connection 230/24 V AC, 50/60 Hz, switching capacity: heating 10(4) A / 230 V AC and 2(2) A / 24 V AC, cooling 5(2) A / 230 V AC and 1(1) A / 24 V AC, controlling range 5 °C to 30 °C, temperature range limitation in the casing cover, degree of protection IP 30, flat casing, colour alpine white.

Order reference	Art.-Nr.	Width x Height x Depth mm	
RTi 210	355510	74x 74 x 23	

Electronic room temperature controller (fan speed controller)



RTi 402

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RTi 402	338810	Electronic room temperature controller for speed control (wave packet control) for storage heaters with ON/OFF switch for discharge operation and ON/OFF switch for operating mode (normal / lowering at night / supplementary heating), controlling range 5 °C to 30 °, external temperature lowering at night (approx. 5 K), temperature range limitation integrated in the casing cover, switching capacity 230 V / 10–180 VA, supplementary heating 250 V / 16 A, colour alpine white.	147x 79 x 27	

phaseout

Room temperature controller with timer



RTU 400 U



RTU 200 AT

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RTU 400 U	355530	Electronic room temperature controller with digital weekly timer in flat switch mounting frame for flush mounting; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switching capacity 230 V AC / 8 (2) A (NO contact); controlling range 5 °C to 30 °C; LC display indicating status and operating mode; temperature setting in 0.5 K increments; 3 time programs programmable (1, 2 or 3 heating period intervals); individual allocation of weekday and time program; 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer programme); pilot function TA, programmable temperature range limitation; adjustable load and temperature correction; colour alpine white.	81x 85 x 16	
RTU 200 AT	355600	Electronic ON/OFF room temperature controller with weekly timer, programming of heating-up and lowering times by means of graphic representation of the control elements on the display (shortest switching time 15 min.), lowering temperature can be adjusted, direct selector switches (ON/OFF, Holiday, Party, Mode, Information), automatic daylight saving (summer) / winter time setting taking leap years into consideration, switching capacity 230 V AC / 8 (2) A, temperature setting range 5 °C – 30 °C, colour alpine white, degree of protection IP30, surface mounting.	110x 111 x 26	

Hygostat



H/G 100

Controller for regulation of relative humidity, for humidification and dehumidification, controlling range 30–100% relative humidity, switching capacity: dehumidification 230 V / 5 (0. 2) A, humidification 230 V / 3 (0. 2) A, voltage connection 24–250 V AC, 50/60 Hz, degree of protection IP 30, flat casing, colour alpine white.

Order reference	Art.-Nr.	Width x Height x Depth mm	
H/G 100	330380	74x 74 x 23	

Integrated room temperature controller

Order reference	Art.-Nr.	for device type	Features	
RTID 31	324530	VFDi 20C – VFDi 70C FSD 12C – FSD 48C VNDi 30C – VNDi 50C VTDi 45C – VTDi 75C	Integrated electronic speed controller (wave packet control), complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8 °C to 30 °C.	
RTED 30	324520		Integrated electronic controller, complete kit, can be plugged into the duo charge controller, with switch for "lowering the temperature at night" and switch for "supplementary heating" with control lamps, control panel in control recess, 230 V / 60 VA (fan) / 10 A (supplementary heating), controlling range 8 °C to 30 °C.	
RTEV 99	333990	VFDi...C & ESS...K FSD...C & ESF...K VNDi...C & ESN...K VTDi...C & EST...K	Integrated electromechanical controller with thermal feedback, complete universal kit, with ON/OFF switch and switch for "supplementary" heating with control lamps. Control panel in control recess, 230 V / 10 (4) A, controlling range 5 °C to 30 °C.	

Caution: not for use in combination with water-proofing kits



RTID 31 / RTED 30



RTEV 99

Floor temperature controller

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
BT 401 UN	355450	Electronic floor temperature controller with floor temperature sensor (standard NTC sensor, 4 m cable length, sensor element Ø 7 x 28 mm) for underfloor heating systems; switching capacity 230 V AC / 16 (2) A (NO contact); controlling range 10–50 °C; thermostat dial; temperature range limitation in the casing cover; ON/OFF program switch; LED display for heating operation and temperature lowering; temperature lowering by remote control (approx. 5 K); sensor monitoring; colour alpine white; degree of protection IP 30.	81x 85 x 16	
BT 300 AN	355440	Electronic floor temperature controller with remote sensor for underfloor heating systems; controlling range 10 to 42 °C; mechanical limiting of the setting range possible; ON/OFF switch and heating mode display; switching contact 230 V / 16 (4) A; incl. standard NTC sensor, 4 m connection cable length, diameter approx. 8 mm, colour alpine white; IP 30.	74x 70 x 26	
ETR 060 N	328830	Electronic temperature controller with remote sensor, controlling range 0 °C to 60 °C, mounting on top hat rail e.g. installation in terminal block, space required for 2 modular spaces, incl. standard NTC sensor, sensor connection cable length 4 m, sensor element diameter approx. 8 mm; switching contact 230 V / 10 (3) A (NO contact), 230 V / 5 (1.5) A (NC contact).	36x 86 x 60	
BT 060 AN	332080	Electronic temperature controller with remote sensor, controlling range 0 °C to 60 °C, IP 65, incl. standard NTC sensor, sensor connection cable length 4m, diameter sensor element approx. 8 mm, switching contact 230 V / 16 A (changeover contact), surface mounting, degree of protection IP65.	96x 169 x 56	

phase out: BT 060 AN



BT 401 UN



BT 300 AN



ETR 060 N



BT 060 AN

Floor temperature controller with timer



BTU 401 UN



BTU 300 AN

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
BTU 401 UN	355470	Electronic floor temperature controller with digital weekly timer for underfloor heating systems in flat switch mounting frame for flush mounting; floor temperature sensor (standard NTC sensor, 4 m connection cable length, sensor element Ø 7 x 28 mm), can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switching capacity 230 V AC / 12 (2) A (NO contact); controlling range 10°C to 50°C; LC display indicating status and operating mode; temperature setting in 0.5 K increments; 3 time programs programmable (1, 2 or 3 heating period intervals); individual allocation of weekday and time program; 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer program); programmable temperature range limitation; sensor monitoring; colour alpine white; IP30.	81x 85 x 16	
BTU 300 AN	355460	Electronic floor temperature controller with remote sensor and weekly timer, programming of heating-up and lowering times by means of graphic representation of the control elements on the display (shortest switching time 15 min.), lowering temperature can be adjusted, direct selector switches (ON/OFF, Holiday, Party, Mode, Information), automatic daylight saving (summer)/ winter time setting, taking leap years into consideration, switching capacity 230 V / 13 (2) A, controlling range 10°C to 40°C, incl. standard NTC sensor, 4 m connection cable length, diameter approx. 8 mm, colour alpine white, degree of protection IP30, surface mounting.	110x 111 x 26	

Room temperature controller with floor temperature limiter



RTW 401 UN



RTWU 401 UN

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RTW 401 UN	355540	Electronic room temperature controller with electronic floor temperature monitoring and floor temperature sensor (standard NTC sensor, 4 m connection cable length, sensor element Ø 7 x 28 mm), with flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, switching capacity 230 V AC / 10(2) A (NO contact), setting ranges: Room temperature 5°C to 30°C, floor temperature 20°C to 60°C, thermostat dial, temperature range limitation integrated in the casing cover, ON/OFF program switch, LED display for heating mode, temperature lowering by remote control (approx. 5 K), sensor monitoring, adjustable load correction, colour alpine white, IP 30, for use with edge zone supplementary heating and underfloor direct heating. Depth 16 mm when mounted in flush box.	81x 85 x 16	
RTWU 401 UN	355550	Electronic room temperature controller with digital weekly timer with electronic floor temperature monitoring, floor temperature sensor (standard NTC sensor, 4 m cable length, sensor element Ø 7 x 28 mm), with flat switch mounting frame for flush mounting as standard, can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer, LC display indicating status and operating mode, temperature setting in 0.5 K increments, 3 time programs (1, 2 or 3 heating period intervals), individual allocation of weekday and time program, 4 operating modes can be selected (antifreeze / lowering temperature / comfort temperature / timer program), programmable temperature range limitation, sensor monitoring, switching capacity 230 V AC / 10 (2) A (NO contact), setting ranges: room temperature 5°C to 30°C, floor temperature 20°C to 60°C, sensor monitoring, adjustable load and temperature correction, colour alpine white, IP 30, for use with edge zone supplementary heating and underfloor direct heating.	81x 85 x 45	

Floor temperature limiter

Capillary tube controller for temperature limiting, setting range 0°C to 60°C, switching contact 230 V / 15(8) A, using flush box (100 x 100 mm) and sensor sleeve, capillary tube length 2.4 m, degree of protection IP 20 (when mounted in flush box).



TB072

Order reference	Art.-Nr.	Width x Height x Depth mm	
TB072	317190	107x 107 x 43	

Heating/cooling ON/OFF room temperature controller

In flat switch mounting frame for flush mounting



RTK 601U



TPF341

Order reference	Art.-Nr.	Features	Width x Height x Depth mm	
RTK 601U	355610	Electronic room temperature controller heating/cooling; switchable between "Heating" and "Cooling" operating modes using an external change-over contact of the heat pump manager; flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer; switch ON / antifreeze; controlling range 5 to 30 °C; thermostat dial; temperature range limitation in the casing cover; operating voltage 24 V ~/50 Hz; switching capacity 24 V AC ~/1 A, can control up to 5 valve actuators (24 V~ closed when de-energised), IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dew point sensor TPF 341, for interrupting cooling operation when there is risk of condensate, optional connection (dew point sensors are not included in the scope of supply).	82x 86 x 45	
RTK 602U	355620	Mechanical ON/OFF room temperature controller with changeover switching contact for heating and cooling in combination with a heat pump. The "Heating" or "Cooling" switching response can be chosen via a switch. When the heat pump is in cooling mode, the room temperature controller must be manually set to cooling operation. Heating or cooling operation is based on the setting of the heat pump manager. Flat switch mounting frame for flush mounting as standard; can be installed in virtually all flat switch programs using an adapter element (50 x 50 mm according to DIN 49075) provided by the flat switch program manufacturer (non included in the scope of supply); controlling range 5–30 °C; thermostat dial; temperature range limitation in the casing cover; switching capacity 230 V AC / 5 (2) A; connection of up to 5 actuators possible, IP30 when flush-mounted, colour alpine white (similar to RAL 9010). Dimensions in mm (W x H x D) 81 x 85 x 28.5 (height 16 mm mounted in flush box). Connection of a dew point sensor to interrupt the cooling operation where there is risk of condensation is not possible. This must be done using a higher-level regulation system (e.g. RKS WPM).	81x 85 x 16	
TPF341	350980	Flexible OCB, which sends a signal to the room temperature controller (RTK 601U) when it comes into contact with moisture, connection cable (10 m, 2 x 0.25 mm ²).	38x 40	

Discount group complete systems

When the dew point sensor comes into contact with condensation, the cooling of a room is interrupted by the motors attached to the room temperature controller.

Temperature sensor



F3110



F3128



FG3115



TFH821

Order reference	Art.-Nr.	Features	
F3110	329940	Temperature sensor: Can be used as floor or external temperature sensor e.g. for AR 05DCU, connection cable 20 m, sensor sleeve (D _A x H) 12 / 10 mm (flat) x 50 mm, standard NTC sensor according to DIN 44574.	
F3128	343140	Standard NTC-2 compact sensor (2,43 kOhm/20 °C) according to DIN 44574 for use as floor or external temperature sensor, insertion flow and return flow sensor, or hot water cylinder sensor, connection cable 6 m, sensor sleeve (D _A x L) 6.2 x 32 mm.	
FM 3114	327670	Magnetic installation strap-on sensor for weather dependent and residual heat dependent control of a storage heater in connection with DC charge control and charge controller AR 05DCU, standard NTC sensor.	
FG3115	336620	Norm NTC-2 temperature sensor (2.43 kOhm/20 °C) according to DIN 44574 with weather proof casing for surface mounting, terminal connection.	
TFH821	354470	Sensor sleeve for floor temperature sensor. Putting the sensor in the sleeve with a heat transfer compound. Sensor must be laid in the heater mat level.	

phase out: FM 3114

Instantaneous water heater ecotronic

Connection voltage 3/PE ~400 V, 50 Hz
Degree of protection IP 25



DEE..03

Instantaneous water heater with electronic output adjustment, infinitely variable temperature setting via symbols using a rotary encoder. Bare wire heating system for instant DHW heating and high resistance to lime scaling. Reduced switch-on volume flow of 2.6 l/min, Easy replacement of old devices, flexible cold water and hot water connections, electrical connection optionally from above or below, suitable for DVGW (German Technical and Scientific Association for Gas and Water) tested plastic pipe installation, mounting under a worktop using special accessories. Colour white with grey control panel.

Order reference	Art.-Nr.	Rated power W	Width x Height x Depth mm	Weight kg	
DEE1803	359140	18000	236x 472 x 139	4.1	
DEE2103	359150	21000			
DEE2403	359160	24000			

Special accessories for DLE ..02 flow heaters



DLE 02 RBS

Order reference	Art.-Nr.	for device type	Features	
DLE 02 AP	344100	DEC..02 DES ..02 DEE ..02 DEH ..02	Mounting set for surface mounting installation / direct connection	
DLE 02 RBS	342210		Pipe kit for mounting under a worktop	
SA1	324990	DEC..02	Solar fittings (pre-mixing of domestic water) for use with a water inlet temperature from 55 °C to 100 °C e.g. from a solar energy system in connection with a DEC ..02 device.	

phase out: SA 1



SA1

Compact instantaneous water heater

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24



DZU352

Hydraulically controlled compact flow heater, pressure-resistant design for mounting under a worktop, can be used either as an open or closed device. Used e. g. for hand wash basins.

Order reference	Art.-Nr.	Rated power W	Features	Width x Height x Depth mm	Weight kg	
DZU352	343280	3500	Connection cable with plug.	144x 235 x 100	1.7	
DZU462	343290	4600	Fixed connection.			

Boiling water device

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 44



ACB 215

Plastic casing, capacity of 5 litres; temperature range approx. 38°C to boiling point, cooking level, 3 handle fittings integrated in device, steam outlet integrated into the water outlet pipe, connection cable with plug approx. 0.6 m, colour white. Degree of protection IP 44 (splash water protection), protection class I.

Order reference	Art.-Nr.	Rated power W	Nominal volume l	Width x Height x Depth mm	Weight kg	
ACB 215	348280	2000	5	293x 270 x 198	2.5	

Compact hot water cylinder for mounting under a worktop

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24



ACK 5 U



ACK 10 1U

Pressure-less design, temperature setting range 35 °C to 85 °C energy-saving and antifreeze settings, connection cable and plug, water connections metal 3/8" thread, safety temperature limiter with reset function.

Order reference	Art.-Nr.	Rated power W	Nominal volume l	Features	Width x Height x Depth mm	Weight kg	
ACK 5 U	339590	2000	5	Open fittings included in the scope of supply	256x 390 x 213	3.5	
ACK 5 UA	339630						
ACK 10 2U	361850						
ACK 10 2UA	361860	2000	10	Open fittings included in the scope of supply	310x 466 x 265	4.4	
ACK 10 1U	351030						
ACK 10 1UA	351050						

phase out: ACK 10 1U / ACK 10 1UA

Compact hot water cylinder for mounting over a worktop

Connection voltage 1/N/PE ~230 V, 50 Hz
Degree of protection IP 24



ACK 5 O



ACK 10 2O

Pressure-less design, temperature setting range 35 °C to 85 °C with energy-saving and antifreeze settings, connection cable and plug, water connections metal 1/2" thread, safety temperature limiter with reset function.

Order reference	Art.-Nr.	Rated power W	Nominal volume l	Features	Width x Height x Depth mm	Weight kg	
ACK 5 O	339580	2000	5	Open fittings included in the scope of supply	256x 390 x 213	3.5	
ACK 5 OA	339620						
ACK 10 2O	361870						
ACK 10 2OA	361880	2000	10	Open fittings included in the scope of supply	310x 466 x 265	4.4	

Universal wall-mounted cylinders

Degree of protection IP 24



ACH ... Z

Universal wall-mounted cylinders for closed or open use, infinitely variable temperature adjustment 25 °C to 85 °C, inner container made of steel with special enamelling, anti-corrosion bar (protection anode), CFC-free thermal insulation for minimal heat loss, six individual heating elements in an enamelled protection tube (can be replaced individually without emptying the device), sheet steel outer surface.

Order reference	Art.-Nr.	Nominal volume l	Width x Height x Depth mm	Weight kg	
ACH 51 Z	350620	50	500x 640 x 512	30	
ACH 81 Z	350630	80	500x 860 x 512	36	
ACH 101 Z	350640	100	500x 1005 x 512	41	
ACH 121 Z	350650	120	500x 1160 x 512	46	
ACH 151 Z	350660	150	500x 1375 x 512	52	

Rated power universal wall cylinders

Rated power universal wall cylinders of the ACH ... Z series for different electric connections. The respective switching versions can be found in the installation instructions.

power rating ACH 31 Z				power rating ACH 51 Z - ACH 151 Z			
off peak		on peak		off peak		on peak	
power rating	voltage	power rating	voltage	power rating	voltage	power rating	voltage
4.2	3/N/PE ~ 400V	1.4 / 4.2 0.7 / 4.2	3/N/PE ~ 400V	6.0 / 4.0	3/N/PE ~ 400V	3.0 / 6.0 2.0 / 6.0 1.0 / 6.0	3/N/PE ~ 400V
2.8 / 2.1	2/N/PE ~ 400 V	1.4 / 2.1 0.7 / 2.1	2/N/PE ~ 400 V	4.0 / 3.0 / 2.0	2/N/PE ~ 400 V	2.0 / 4.0 1.0 / 4.0 3.0 / 3.0 2.0 / 3.0 1.0 / 2.0	2/N/PE ~ 400 V
2.1 / 1.4 / 0.7	1/N/PE ~ 230 V	1.4 / 2.1 0.7 / 2.1	1/N/PE ~ 230 V	4.0 / 3.0 / 2.0 / 1.0	1/N/PE ~ 230 V	3.0 / 4.0 2.0 / 4.0 1.0 / 4.0 1.0 / 2.0	1/N/PE ~ 230 V

Single-circuit wall-mounted cylinder

Degree of protection IP 24



ACH ... E

Single-circuit wall-mounted cylinders for closed or open use, infinitely variable temperature adjustment from 25 °C to 85 °C, inner container made of steel with special enamelling, anti-corrosion bar (protection anode), CFC-free thermal insulation for minimal heat loss, three individual heating elements in an enamelled protection tube (can be replaced without emptying the device), sheet steel outer surface.

Order reference	Art.-Nr.	Nominal volume l	Width x Height x Depth mm	Weight kg	
ACH 31 E	350670	30	500x 545 x 512	23	
ACH 51 E	350680	50	500x 640 x 512	30	
ACH 81 E	350690	80	500x 860 x 512	36	
ACH 101 E	350700	100	500x 1005 x 512	41	
ACH 121 E	350710	120	500x 1160 x 512	46	
ACH 151 E	350720	150	500x 1375 x 512	52	

Special accessories wall cylinders



SG1



SG2

Order reference	Art.-Nr.	for device type	features	
SG1	326350	ACH 31 E – ACH 151 E ACH 31 Z – ACH 151 Z	for wall cylinders, required for closed operation, for pressure up to 4.8 bars.	
SG2	326360		for wall cylinders, required for closed operation, for pressure above 4.8 bars, with pressure reducer.	

Floor-standing cylinders

Degree of protection IP 24



ACS ... Z

For closed use as a single-circuit or two-circuit cylinder, infinitely variable temperature adjustment to 85 °C, inner container made of steel with special enamelling, anti-corrosion bar (protection anode), CFC-free thermal insulation for minimal heat loss, sheet steel outer surface, dial thermometer, hot/cold water connection 1" thread, colour white (similar to RAL 9016).

Order reference	Art.-Nr.	Nominal volume l	Diameter mm	Connection circula- tion	Height mm	Weight kg	
ACS 200 Z	339640	200	600	3/4	1365	99	
ACS 300 Z	339650	300			1797	130	
ACS 400 Z	339660	400	670	1	1832	170	

Rated power Universal floor-mounted cylinders

Rated power floor-mounted cylinders of the ACS ... Z series for different electric connections. The respective switching versions can be found in the installation instructions.

power rating ACS 200 Z - ACS 400 Z			
off peak		on peak	
power rating	voltage	power rating	voltage
6,0	3/N/PE ~ 400V	2,0 / 6,0	3/N/PE ~ 400V
3,0 / 4,0	2/N/PE ~ 400V	3,0 / 6,0	
2,0 / 4,0	1/N/PE ~ 230V	4,0 / 6,0	
		6,0 / 6,0	

Accessories for floor-standing cylinders



SVK852

Order reference	Art.-Nr.	for device type	features	
SVK852	326660	ACS ... Z	For the cold water connection of drinking water cylinders to the supply network according to DIN 1988; connection 1" external thread.	
ACS STF	341910		Supporting feet, height-adjustable, contents 3 items	

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ACH 121 E	350710	4015627350717	112
ACH 121 Z	350650	4015627350656	111
ACH 151 E	350720	4015627350724	112
ACH 151 Z	350660	4015627350663	111
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ACH 51 Z	350620	4015627350625	111
ACH 81 E	350690	4015627350694	112
ACH 81 Z	350630	4015627350632	111
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ACK 10 10A	351040	4015627351042	111
ACK 10 11U	351030	4015627351035	111
ACK 10 1UA	351050	4015627351059	111
ACK 10 20	361870	4015627361874	111
ACK 10 20A	361880	4015627361881	111
ACK 10 2U	361850	4015627361850	111
ACK 10 2UA	361860	4015627361867	111
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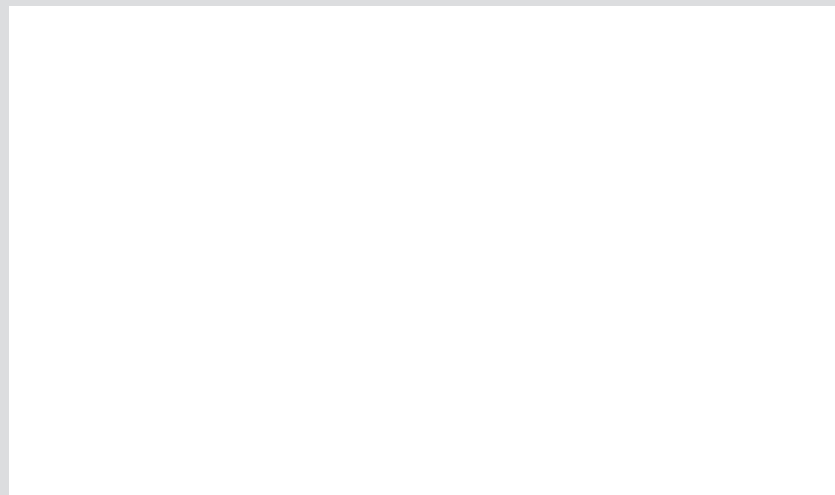
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